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A CATALOGUE
OF THE
AMERICAN HESPERIIDAE
IN THE
BRITISH MUSEUM
(NATURAL HISTORY)

A CATALOGUE
OF THE
AMERICAN HESPERIIDAE

indicating the classification and nomenclature adopted

IN THE BRITISH MUSEUM
(NATURAL HISTORY)

by

BRIGADIER W. H. EVANS
C.S.I., C.I.E., D.S.O.
Honorary Associate, British Museum (Natural History)

PART III
(Groups E, F, G)
PYRGINAE. Section 2
With Plates 26 to 53

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PART III

INTRODUCTION

Part I of this *Catalogue of the American Hesperiidae* in the British Museum (Natural History) dealt with "Group A", the sub-family *Pyrrhopyginae*. Part II dealt with the first half of the sub-family *Pyrginae*, comprising *B. Augiades Group*, *C. Urbanus Group* and *D. Celaenorrhinus Group*. Part III deals with the second half of the sub-family *Pyrginae*, which is separated from the first half by the following characters:

1. Third segment of palpi porrect, or protruding in front of the face. (*Zestusa* was the only genus with this character, that was included in Group B of the first half.)
2. Forewing cell generally shorter than the dorsum and the lower radial veinlet generally absent.
3. The wings generally less produced at the apex of the forewing and the tornus of the hindwing.

The genera contained in the second half of the *Pyrginae* have been divided into the following three groups on the characters specified.

E. Telemiades Group. Abdomen shorter than the dorsum of the hindwing. Antennal club bent at or beyond its middle. Believed to rest always with the wings flat. 59 genera. A Neotropical group, believed to be of Tropical origin and represented in the Old World by the *Tagiades Group*. Several genera have penetrated into the Nearctic region.

F. Erynnis Group. Abdomen shorter than the dorsum of the hindwing. Antennal club bent before its middle. Under surface of the anterior portion of the forewing more concave than usual, giving rise to the name "Batwing". Resting position unknown: in the Old World *Erynnis* can hold its wings erect or flat and sleeps with them penthouse-wise. 16 genera. The group is believed to be of Palaearctic origin. In America there has been a great Neotropical development, as well as a considerable Nearctic development of the genus *Erynnis*.

G. Pyrgus Group. Abdomen as long as the dorsum of the hindwing. Antennal club blunt and generally bent at its commencement. The wings may be erect or flat in repose. 4 genera. The group is of Palaearctic origin with a considerable development in the Nearctic and Neotropical regions.

In the Catalogue (1949) of the Hesperiidae of the Old World, excluding Africa, *Erynnis* was included in the *Pyrgus Group*, but it was pointed out (page 16) that the type of genitalia peculiar to *Erynnis* was to be found in America in a number of allied genera and that it might prove necessary to separate them from the *Pyrgus Group*. The separation is considered justified, but further knowledge derived from the early stages and resting positions may necessitate interchanges between the three groups herein defined.

The large *Telemiades Group* of 59 genera (as compared with 25 in the Old World) has been divided into a number of sub-groups, which more or less interlock or overlap. Genitalia have been taken as the primary character for the arrangement of species within each genus. But, when it comes to the arrangement of genera within a group, for the solution of the ever insoluble problem of straight-lining an all-directional evolution, other considerations must be taken into account. For the convenience of workers superficial characters are preferable to internal ones, and so the form of the antennal club and the wing shape have been taken as the primary characters for the arrangement adopted.

Great difficulty has often been found in correctly interpreting the descriptions given by authors of new species. This remark applies not only to the older authors, but also to recent descriptions where genitalia figures have been given. In genera such as *Nisoniades*, *Pellicia*, *Bolla* and *Staphylus*, where many of the species are superficially alike, minor differences in markings are of little account and the genitalia must be examined for accurate determination. Where the genitalia are asymmetric, there is often a considerable range of individual, as well as subspecific, variation, and only by examining a considerable material is it possible to appreciate the relationships. Most of the published figures of genitalia have been made from slides, wherein a three-dimensioned object is reduced to two dimensions with differing results in the case of two really identical species, while the important ventral view of the uncus cannot be given. In more than one case it has been found that what purports to be an internal view of a clasp is actually an external one, an easy mistake to make with a transparency. The drawings for this work have been made from genitalia mounted on cards or opened out on the abdomen without removal. This method has the disadvantage of not portraying the saccus or the lower part of the aedoeagus and any spines, etc., therein: but it does permit of the rapid examination of long series and of a much more natural picture of the structures. The figures have been drawn freehand with the object of indicating the differences between species or sub-species.

Every effort has been made to assign all published names to their correct positions and it is hoped that authors of names or students able to examine types will publish corrections where mistakes have been made.

The form of presentation and the abbreviations used are the same as for the previous parts. "Nudum" is used for the bare portion of the antennal club and, where followed by numbers such as 6/10, there are 6 segments on the unbent portion of the club and 10 on the reflexed apiculus.

The material contained in Groups E, F, G in Part III consists of 25,000 specimens, which are arranged in 79 genera (12 new), containing 351 species (58 new) and 258 additional sub-species (106 new): 430 published names (1 new) have been placed as synonyms of specific names and 38 as synonyms of names of genera. The B. M. has the types of 192 species, 155 sub-species and 82 of names placed as synonyms.

E. TELEMIADES GROUP

Antennae generally = $\frac{1}{2}$ costa. The variations of the antennal club and the apiculus are fully dealt with in the key, wherein they have been taken as a primary character for defining sub-groups and genera.

Palpi with the third segment always porrect and sometimes very long and pendulous. The second segment is more or less sub-erect.

Legs have the mid tibiae spined in 4 genera: the upper pair of spurs on the hind tibiae are absent in some species of 2 genera.

Abdomen always shorter than the hindwing dorsum.

Forewing cell generally shorter than the dorsum: the lower median veinlet is only present in the first sub-group.

Hindwing vein 5 is always well marked, but is not tubular: it is generally oblique, nearer vein 6 at its origin and nearer vein 4 at the termen.

Secondary sexual characters are of various types and are specified in the keys. A costal fold is frequent on the forewing as are tibial tufts on the hindlegs fitting into pouches at the end of the thorax. Dorsal hair tufts on the hindwings are prevalent in the first sub-group and sub-costal hair tufts in the second sub-group. The West Indian genus *Burca* is peculiar in having brands on the forewing, which is a feature of many species of the Hesperiinae.

Wing shapes and patterns are more varied than in any other group of the Hesperiidae.

The use of the antennal club as a primary character has resulted in what appears to be a satisfactory arrangement. But there are anomalies. *Noctuana* and *Anisochoria* have affinities in Group F. *Viola* is a close relation of *Pellicia*. *Trina* and *Diaeus* are allied to *Antigonus*.

The division of *Pellicia* and *Cyclosemia* into a number of genera appears to be justified, even though some of the new genera are based primarily on facies.

1a (11a). F lower median veinlet present from mid cell to about origin of vein 4. H dorsum produced and angled at end of vein 1b so that vein 1a is much shorter than vein 1b and often no longer than the very short abdomen. Shaft of antennae usually plain.

Telemiades Sub-group of 10 genera

1b (4a). F apex conspicuously truncate, termen angled at end of vein 5 or 6 and concave below that point.
1c (3). H V-shaped at tornus, but not toothed or tailed. Upf with a continuous white (or yellow) central band.
1 (2). F cell very long, as long as wing at end of vein 3: vein 4 nearer to vein 5 than to vein 3: no apical spot in space 9. Antennae hooked: nudum 3/17. Palpi short. ♂ with costal fold.
Spathilepia. 1 species. Mexico–Argentine.

2 (1). F cell as long as wing to end of vein 2: vein 4 nearer to vein 3 than to vein 5: with a hyaline spot in space 9. Antennae angled: nudum 14/9. Palpi long. ♂ uph tuft near base of vein 1b and unf from base of dorsum.
Oechydrus. 1 species. Bolivia–Argentine.

3 (1c). H produced to a short broad tail at end of space 2 and a tooth at end of vein 1b. Antennal club blunt, no apiculus, nudum 12. Palpi long. Tawny brown with hyaline spots F.
Jera. 1 species. Ecuador–Peru.

4a (1b). F not conspicuously truncate. Palpi short.
4 (5a). F origin vein 11 (and central cell spot) nearer base than apex. H produced at end of vein 4. Antennal club slender, arcuate: nudum 6/16. ♂ uph with a tuft near base of space 1b: also a black tuft unf on dorsum near base, correlated with a speculum uph at base of costa and cell. Upf with conspicuous hyaline spots.
Marela. 2 species. Guiana–S. Brazil.

5a (4). F origin of vein 11 (and cell spot, if present) mid base and apex or nearer apex.
5b (8a). F vein 12 short, ends before end of cell.
5c (6a). Antennal apiculus short, about $\frac{1}{4}$ of rest of club: nudum 6/10 to 10/15. Upf with an apical spot in space 9. ♂ uph a tuft near base of space 1b. F with or without hyaline spots.
Cogia. 12 species. U.S.A–Argentine.

6a (5c). Antennal apiculus long, at least $\frac{1}{2}$ rest of club. Upf no apical spot in space 9.
6 (7). F cell = dorsum. Antennal nudum 6/16. ♂ upf usually with a costal fold. Above, with dark bands: upf with or without hyaline spots.
Telemiades. 14 species. Mexico–Argentine.

7 (6). F cell much < dorsum. Antennal nudum 9/16. ♂ uph with a recumbent tuft over a speculum in space 7, correlated on unf with a white oval brand in space 2 surrounded by a large speculum. Purple-brown with hyaline apical spots upf.
Pyrdalus. 1 species. Honduras–Bolivia and Amazons.

8a (5b). F vein 12 long, ends over end cell.
8 (9a). Mid tibiae spined. Antennal apiculus long: nudum 9/13. ♂ with a costal fold upf. Shining golden brown with hyaline apical spots and typically with a pupilled ocellus mid cell upf.
Mimia gen. nov: type *Cyclosemia phidyle* Godman & Salvin 1894. 1 species. Panama–Bolivia.

9a (8). Mid tibiae smooth.
9 (10). F cell < dorsum. Antennal nudum 13/12. ♂ unf with a double tuft near base over a large speculum, correlated to a large speculum about base costa uph, which is conspicuously hunched. Above, plain dark brown, typically with a central white hyaline band.
Ectomis. 1 species. Guiana–Amazons.

10 (9). F cell = dorsum. Antennal nudum 8/11. ♂ uph with a tuft near base of space 1b and, typically, with a second tuft near base costa. Upf with numerous small hyaline spots, including a spot in space 9.

Nerula. 2 species. Venezuela, Amazons.

11a (1a). F no trace of the lower median veinlet.

11b (40a). Antennal apiculus shorter than the unbent portion of the club. Antennae at least half as long as costa. Antennal shaft plain.

11c (29a). Antennal apiculus slender, hooked. H dorsum produced and generally > costa F. Uncus undivided.

Nisoniades Sub-group of 17 genera

11d (13a). Mid tibiae spined. Palpi long and smooth.

11 (12). Hind tibiae without the upper pair of spurs. H tornus lobed. Antennal nudum 9/11. Purple-brown with a hyaline cell spot and 3 apical spots.

Conognathus. 1 species. Guiana, Amazons.

12 (11). Hind tibiae normal. Antennal nudum 6/11. ♂ uph with a large black area of modified scales. Above violet-brown: upf with hyaline apical spots on a black patch.

Arteurotia. 1 species. Mexico–Guiana.

13a (11d). Mid tibiae smooth as usual.

13 (14a). Antennae longer than half costa: nudum 11/11. ♂ generally with a costal fold: no tibial tuft. F with small hyaline apical spots and sometimes with a pupilled ocellus in the cell.

Eracon. 8 species. Costa Rica–Argentine.

14a (13). Antennae = ½ costa.

14 (15a). F cell long = dorsum. Antennal nudum 6/10. F truncate at apex. ♂ with a tuft on the hind tibiae entering a thoracic pouch. Black with numerous small hyaline spots on F and tornal half of H white or blue.

Spioniades. 3 species. Honduras–Bolivia and S. Brazil.

15a (14). F cell < dorsum.

15b (28). Head not green.

15c (23a). F without a black ocellus in cell.
15d (22). F not conspicuously truncate at apex.
15e (17a). Antennal nudum long, more than 20 segments.
15 (16). Palpi long, smooth, tapered, convergent. Antennal nudum 18/11. ♂ with secondary sexual characters as for *Nisoniades*. Above, velvet black with blue postdiscal spots.

Mycteris. 1 species. Guatemala–Bolivia and S. Brazil.

16 (15). Palpi normal. Nudum 11/11 to 18/13. Typically ♂ with a costal fold. Large dark species, resembling *Telemiades*, with dark bands.

Iliana. 4 species. Colombia-Bolivia and Upper Amazons.

17a (15e). Antennal nudum < 20 segments: 5/6 to 8/8. ♂ with secondary sexual characters and genitalia of the *Nisoniades* type, more or less developed.
17b (20a). Upf marked with bands or hyaline spots.
17 (18a). Upf without hyaline spots: a broad white band across both wings. Nudum 7/7. ♂ no secondary sexual characters.

Sophista. 2 species. S. Peru–Bolivia, S. Brazil.

18a (17). Upf with hyaline spots.
18 (19). Upf with discal as well as apical hyaline spots and typically also with a white band. ♂ with secondary sexual characters as for *Nisoniades*. H more or less quadrate, produced at end of vein 3.

Polyctor gen. nov: type *Prygus polyctor* Prittwitz 1868. 5 species. Mexico–Argentine.

19 (18). Upf only with hyaline apical spots. ♂ unh vein 7 shifted back at its origin, where it is often swollen and may be connected to the radius: uph base of vein 7 with a hair tuft. Uncus undivided; gnathos may be prostrate along the vinculum: aedoeagus bent inwards and swollen at the bend: clasps broad and asymmetric, valva often broader than the cuiller.

Nisoniades. 15 species. Mexico–Argentine.

20a (17b). Upf without hyaline spots.
20 (21). Above, without a purple glaze. Palpi normal, short and parallel. Nudum 7/10 to 8/8: Genitalia often with the uncus asymmetric.
Pachyneuria. 8 species. Mexico–Bolivia and Paraguay.

21 (20). Above, with a strong purple glaze and upf with alternating dark and pale areas along the costa. Nudum 5/8 to 8/8. ♂ secondary sexual characters as in *Nisoniades*. Palpi convergent.
Pellicia. 11 species. Mexico–Argentine.

22 (15d). F conspicuously truncate at apex and termen concave to vein 5. Palpi very long. ♂ may have a costal fold. Nudum 3/13. Genitalia of *Nisoniades* type.
Noctuana. 5 species. Mexico–Argentine.

23a (15c). Upf with a black spot or ocellus in cell.
23b (27). Upf the dark discal band absent, or broken, or placed much nearer to the termen than to the ocellus in the cell.
23c (25a). Antennal apiculus longer than nudum on unbent part of club, abnormal for sub-group.
23 (24). Upf with hyaline apical spots. Nudum 8/19 to 2/17. ♂ hind tibiae with a recumbent tuft, but no thoracic pouch. Genitalia abnormal: uncus divided.
Morvina gen. nov: type *Tagiades morvus* Plötz 1884. 3 species. Mexico–Argentine.

24 (23). Upf without hyaline apical spots. Nudum 3/13 to 10/17. ♂ with a tuft on the hind tibiae entering a thoracic pouch: also a short tuft of stiff hairs at base of costa uph, overlying a swollen area at base of cubitus unf.
Myrinia gen. nov: type *Cyclosemia myris* Mabille 1897. 4 species. Guiana–Bolivia and S. Brazil.

25a (23c). Apiculus normal, not longer than nudum on unbent part of club.
25 (26). Upf ocellus blind. Typically termen F and H centrally angled. ♂ with a rudimentary tuft on the hind

tibiae: no thoracic pouch. Uncus abnormal for subgroup, bifid. Nudum 11/11 to 12/12.
Xispia. 2 species. Bolivia, Paraguay.

26 (25). Upf ocellus pupilled. Termen F and H evenly convex. ♂ no secondary sexual characters. Genitalia of *Nisoniades* type. Nudum 8/8.
Ocella gen. nov: *Cyclosemia albata* Mabille 1888. 2 species. Peru, Bolivia, S. Brazil.

27 (23b). Upf dark discal band regular throughout and placed midway between the bi-pupilled ocellus and the termen. Nudum 2/9 to 8/8. ♂ typically with a tuft on the hind tibiae, but no thoracic pouch.
Cyclosemia. 7 species. Mexico to Bolivia and S. Brazil.

28 (15b). Head above, brilliant metallic green. Nudum 5/10. Palpi short. ♂ with a costal fold upf.
Gorgopas. 5 species. Nicaragua–S. Brazil.

29a (11c). Antennal apiculus obtuse. H dorsum = costa.
29b (36a). H quadrate, greatest extent at end of vein 3.

Staphylus Sub-group of 7 genera

29 (30a). ♂ secondary sexual characters of the *Nisoniades* type: uph generally with a tuft at base of space 7: aedoeagus bent forward, clasps broad and asymmetric. Generally violet washed, marked with dark bands, as in *Pellicia*: no hyaline spots. Nudum 12.
Viola gen. nov: type *Staphylus alicus* Schaus 1902. 5 species. Colombia–Argentine.

30a (29). ♂ secondary sexual characters and genitalia not of the *Nisoniades* type.
30b (33a). ♂ secondary sexual characters and genitalia not of the *Antigonus* type: no tibial tufts and no style to the clasp. ♂ F may have a costal fold. Dark brown species with few, or no, hyaline spots.
30c (32). Antennal nudum 13.
30 (31). ♂ with peculiar secondary sexual characters: costal fold, when present, covers a hair pencil: upf with

narrow oblique brands covered by a large area of specialised scales. Confined to the W. Indies.

Burca. 5 species. Cuba, Haiti.

31 (30). ♂ with or without a plain costal fold. Generally larger than *Staphylus* and termen H even.

Bolla. 23 species. Mexico–Argentine.

32 (30c). Antennal nudum 10 to 11. Generally small, ♂ F 13 mm. Termen H often irregular. Some species have the head golden or shining green.

Staphylus. 37 species. U.S.A.–Argentine.

33a (30b). ♂ secondary sexual characters and genitalia of the *Antigonus* type: no costal fold: ♂ hind tibiae with a tuft entering a thoracic pouch: clasp with a long style.
33b (35). F and H termen regular. No hyaline spots.
33 (34). F dorsum straight. Small dark species overlaid with grey or yellow scales. Typically with the upper spurs absent on the hind tibiae. Nudum 11–12. Uncus undivided.

Plumbago gen. nov: type *Achlyodes plumbago* Plötz 1884. 3 species. Guiana–S. Brazil.

34 (33). F dorsum more or less concave. Nudum 9. Light brown with white edged dark bands: unh with white lines. Uncus divided.

Trina gen. nov: type *Helias geometrina* Felder 1867. 1 species. Venezuela–Argentine.

35 (33b). F and H termen irregular: dorsum F concave. Nudum 12. Uncus undivided. Above, with white spots F and H: below, white except for a broad dark apex unf.

Diaeus. 1 species. Mexico–Argentine.

36a (29b). H triangular, widest at costa or dorsum: termen straight or evenly convex.

Quadrus Sub-group of 4 genera

36 (37a). Palpi long, longer than head. Nudum 12. ♂ with a tuft on the hind tibiae fitting into a thoracic pouch. Genitalia asymmetric: clasps peculiar, fitted with internal

tufts. Above, variegated dark brown and violet-brown, with 2 hyaline apical spots.

Gorgythion. 4 species. Mexico–Paraguay.

37a (36). Palpi short, not longer than head. Clasp with or without a short style. Uncus not divided.

37 (38a). Nudum 11–12 segments entirely on the apiculus. Dark species with dark markings, generally without even hyaline apical spots. ♂ generally without secondary sexual characters, but 2 species have a recumbent tuft on the hind tibiae.

Ouleus. 8 species. Mexico–Paraguay.

38a (37). Nudum partly on unbent part of club.

38 (39). Nudum 6/11. No secondary sexual characters. Purple to violet-brown with dark areas and inconspicuous hyaline spots: below, tawny.

Zera gen. nov: type *Achlyodes zera* Butler 1870. 7 species. Mexico–Argentine.

39 (38). Nudum 2/9 to 3/10. No secondary sexual characters, except that one species has a tibial tuft entering a thoracic pouch. Pale or dark brown species, usually with conspicuous hyaline spots F and the hindwing is often bright blue above and below.

Quadrus. 8 species. Mexico–Argentine.

40a (11b). Antennal club more or less arcuate about its centre.

40b (49a). H longer at costa than at dorsum. Antennae generally = costa.

40c (44a). Palpi 3rd segment short, shorter than 2nd segment.

Pythonides Sub-group of 4 genera

40d (42a). Uncus undivided: style of clasp absent or very short.

40 (41). F truncate at tornus: H prolonged at costa and angled. Nudum 18. ♂ hind tibiae with a dense tuft entering a thoracic pouch. Pale brown with conspicuous hyaline spots F.

Gindanes. 3 species. Nicaragua–Bolivia and S. Brazil.

41 (40). Termen F and H even. Nudum 15. Hind tibiae often without the upper pair of spurs. Most males have a tibial tuft, entering a thoracic pouch. Dark brown, usually with conspicuous hyaline spots F and a bright blue H: some species, however, are plain, resembling *Pellicia*.

Pythonides. 15 species. Mexico–S. Brazil.

42a (40d). Uncus divided.

42 (43). Clasp without a style. Nudum 13. Above, powdered with blue scales: generally with small hyaline spots F and H sometimes blue. ♂ usually with a costal fold and hind tibiae with a tuft entering a thoracic pouch.

Sostrata. 8 species. Mexico–Argentine.

43 (42). Clasp with a long curved style. Above without blue scaling, but 2 species are bright blue above: hyaline spots inconspicuous or absent. F dorsum sometimes concave. ♂ no costal fold: hind tibiae with a tuft entering a thoracic pouch. Nudum 14.

Paches. 5 species. Mexico–Brazil.

44a (40c). Palpi 3rd segment long, as long as the 2nd segment. Antennal shaft plain. The uncus and gnathos generally deeply divided, the arms wide apart and sharply pointed.

Paramimus Sub-group of 4 genera

44b (47a). Nudum 15. Clasp without a style or only a very short one. ♂ with tibial tuft and thoracic pouch.

44 (45a). F apex broadly truncate to vein 3 from apex. Conspicuous red spots along costa F and black-veined red margins on F and H.

Haemactis. 2 species. Colombia–Bolivia, Upper Amazons.

45a (44). F apex not truncate.

45 (46). Above, with a broad white band across both wings and the broad dark margins crossed by white veins: upf with an orange spot on the inner edge of the white band: apical spots absent or inconspicuous.

Atarnes. 2 species. Mexico–Colombia. Peru.

46 (45). Above, with conspicuous hyaline spots F and a broad white area H: no red or yellow spots.
Milanion. 7 species. Mexico–Argentine.

47a (44b). Nudum 12 segments. Upf usually a red or yellow spot in space 1b.
47 (48). Clasp with a long style. Upf no spot mid costa. Hind tibiae with a tuft entering a thoracic pouch.
Paramimus. 2 species. Panama–Guiana–Matto Grosso.

48 (47). Clasp without a style. Upf with a conspicuous red or yellow spot mid costa. ♂ typically with the hind tibia swollen, a recumbent tuft along the tibia and an erectile tuft from the middle of the femur, no thoracic pouch.
Charidia. 2 species. Colombia–Peru and S. Brazil.

49a (40b). H costa and dorsum sub-equal. Antennae generally < ½ costa.

Antigonus Sub-group of 11 genera

49b (56a). Antennal apiculus sharply pointed.
49c (54a). F dorsum straight.
49d (53). H without hyaline spots.
49e (52). Mid tibiae not spined.
49f (51). F vein 12 short and vein 11 ends over end cell.
49 (50). F apex not truncate, costa short and convex, termen also convex. ♂ generally no secondary sexual characters. Above, generally white-banded, no hyaline spots. Nudum 17.
Potomanaxas. 11 species. Nicaragua–Bolivia.

50 (49). F apex truncate and excavate at end of vein 7, costa long and straight. ♂ sometimes with a costal fold and hind tibiae with a tuft and thoracic pouch. Above, generally with white areas F and H and sometimes with hyaline spots. Nudum 17–19.
Mylon. 11 species. Mexico–Argentine.

51 (49f). F vein 12 long, ending over end cell. ♂ with a costal fold and hind tibiae with a tuft entering a thoracic pouch. Above always with hyaline apical spots and generally with small discal spots as well. Nudum 15–18.

Carrhenes. 5 species. Mexico–Argentine.

52 (49e). Mid tibiae spined. H termen irregular. Nudum 3/13, aberrant. ♂ may have a costal fold and a tuft on the hind tibiae entering a thoracic pouch. F with conspicuous hyaline spots and H usually with a white area.

Clito. 7 species. Guatemala–Bolivia and Brazil.

53 (49d). H and F with conspicuous hyaline spots. Nudum 16. ♂ hind tibiae with a tuft and thoracic pouch: no costal fold. Grey species with many spots.

Xenophanes. 1 species. Mexico–Argentine.

54a (49c). F dorsum concave. H termen more or less irregular.

54 (55). F termen conspicuously produced at end of vein 3 and concave on either side of that point. ♂ with tibial tuft and thoracic pouch: no costal fold. Typically with large hyaline spots F and H. Nudum 16.

Onenses. 2 species. Mexico–Guatemala. Guiana.

55 (54). F termen not produced at end of vein 3. ♂ with a tibial tuft and thoracic pouch: often with a costal fold. Nudum 11 to 18 and longer in one species. Very variable in respect of wing shape and markings.

Antigonus. 8 species. Mexico–Argentine.

56a (49b). Antennal apiculus blunt.

56b (59). F apex not truncate.

56 (57a). F dorsum concave and H termen irregular as in *Antigonus*. Nudum 14–17. ♂ with costal fold, as well as a tibial tuft and thoracic pouch. Tawny greenish-brown with a narrow white band across both wings.

Systasea. 3 species. U.S.A.–Guatemala.

57a (56). F dorsum straight and H termen even. Satyrid-like species without hyaline spots.

57 (58). H produced at tornus: dorsum = costa. Nudum 14. ♂ with tibial tuft and thoracic pouch: no costal fold.

Timochreon. 2 species. Panama–Brazil.

58 (57). H dorsum not produced, < costa. ♂ with a tibial tuft and thoracic pouch: may have a costal fold. Nudum 10.

Zopyrion. 5 species. Mexico–Argentine.

59 (56b). F apex truncate. Palpi very long and pendulous. Nudum 14. ♂ with tibial tuft and thoracic pouch: no costal fold. Markings very variegated.
Anisochoria. 8 species. Mexico–S. Brazil.

KEY TO SPECIES

E.1. SPATHILEPIA Butler 1870: type *clonius* Cramer: fixed by author.

Resembles *Autochton* in having a white forewing band, but easily recognised by the truncated wing. ♂ with a costal fold. The legs are densely fringed, but the fringe outside the hind tibiae is unique, 1½ mm. long, outwardly arcuate and consisting of long, very densely packed greyish-brown hairs, present in both sexes. F vein 5 is much nearer to vein 4 at its origin than to vein 6, an unusual feature in the subfamily. Antennae, nudum of 20 segments.

Single species. ♂ F 24 mm.
clonius Cramer 1775: Surinam: figured. Fig Seitz: genitalia by Godman & Salvin.: Hayward 1948, ♂ and genitalia. B.M. 40 ♂ 6 ♀ Mexico. 15 ♂ 4 ♀ Guatemala. 5 ♂ 2 ♀ Honduras. 1 ♂ Salvador. 3 ♂ Nicaragua. 13 ♂ 4 ♀ Costa Rica. 7 ♂ 1 ♀ Panama. 11 ♂ 3 ♀ Colombia. 13 ♂ 1 ♀ Venezuela. 15 ♂ 1 ♀ Trinidad. 1 ♂ Br Guiana. 4 ♂ Surinam. 5 ♂ Fr Guiana. 10 ♂ 5 ♀ Ecuador. 7 ♂ 1 ♀ Peru. 3 ♂ Bolivia. 7 ♂ 3 ♀ Amazons. 6 ♂ N. Brazil. 28 ♂ 4 ♀ S. Brazil. 4 ♂ Paraguay. 1 ♀ Argentine.

E.2 OECHYDRUS Watson 1893: type *chersis* Herrich-Schäffer: fixed by author.

F truncate: H produced at end of vein 1b. Antennal club stout, bent beyond middle: nudum 14/9. Palpi long, porrect. ♂ uph a radiating hair tuft near the base of space 1b, and a thin tuft unf near base of dorsum.

Single species.
chersis. 4 sub-species.
(a). F hyaline band, white. Unh tornus concolorous with the central dark area, contrasting with the paler submarginal area. Clasp with the lower edge of the cuiller

produced. Small, ♂ F 18 mm. Unf apex ferruginous red, crossed by dark veins. Unh central area to tornus ferruginous red, basal area chocolate: pale submarginal area mottled with grey and brown.

Sub-sp. **rufus** nov: ♂ Novo Friborgo: type B.M.

B.M. 26 ♂ 1 ♀ Novo Friborgo. 1 ♂ 3 ♀ Rio.

(b). Similar. Larger, ♂ F 21 mm. Unf apex chocolate, reddening towards costa, not crossed by dark veins: dark bar at end of cell. Unh central area to tornus dark red or chocolate, barely contrasting with the chocolate basal area: submarginal pale area nearly white, contrasting strongly with the dark central area.

Sub-sp. **evelinda** Butler 1870: ♂ Rio de Janeiro: type B.M. Fig Butler 1874.

B.M. 1 ♂ Rio. 3 ♂ 2 ♀ "Brazil". 3 ♂ Paraná. 3 ♂ 3 ♀ São Paulo. 2 ♂ 1 ♀ Espirito Santo.

(c). Unh tornus paler than the dark central area: otherwise like *evelinda*. ♂ F 19 mm. Cuiller of clasp with the lower edge not produced.

Sub-sp. **chersis** Herrich-Schäffer 1869: ? loc. Fig Seitz: Hayward 1948, ♂ and genitalia.

B.M. 1 ♂ Peru (Cuzco). 13 ♂ Bolivia (Coroico. Yungas, La Paz. R. Tanampaya). 10 ♂ 2 ♀ Paraguay. 4 ♂ 1 ♀ Argentine (Entre Rios. Buenos Ayres).

(d). Upf hyaline band yellow. ♂ F 18 mm. Genitalia and markings unh as *chersis*.

Sub-sp. **ochrilinea** Schaus 1902: ♂ Peru: co-type B.M. Fig Hayward 1948.

B.M. 1 ♂ Peru. 6 ♂ 2 ♀ Argentine (Tucuman).

E.3. JERA Lindsey 1925: type *tricuspidata* Mabille: fixed by author.

Synonym. *Dichelura* Mabille 1902: type *tricuspidata* Mabille: sole species included: homonym of Dichelura Agassiz 1846.

Abnormal in many respects. Antennae without an apiculus, tip rounded, nudum of 15 segments. Palpi long, porrect. H termen irregular, produced and lobed at tornus, also tailed between veins 2 and 3: vein 7 arising from immediately before the upper end of the cell.

Single species.

tricuspidata Mabille 1902: ♂ Ecuador: type B.M. Fig Seitz.
B.M. 4 ♂ Ecuador (Ambato). 2 ♂ Peru (Huancabamba).

E.4. MARELA Mabille 1903: type *tamyroides* Felder: fixed by Lindsey 1925.

Antennae with a long and slender club and a long apiculus: nudum 6/16. Palpi conspicuously porrect, third segment bent down. ♂ with peculiar secondary sexual characters: uph with a tuft in a groove towards base of space 1b: unf an upturned tuft from near base of dorsum.

1 (2). Upf upper spot in space 1b always much larger than the lower spot. Antennae plain. ♂ F 22 mm.

tamyroides Felder 1867: ♀ S. Brazil: type B.M.: figured. Fig Seitz.
B.M. 1 ♂ Br Guiana. 7 ♂ 3 ♀ Amazons (Itaituba. Obidos. Santarem. Pará). 3 ♂ 2 ♀ S. Brazil (Espirito Santo).

2 (1). Upf upper spot in space 1b never larger than the lower spot. Antennae conspicuously white before the apiculus.

tamyris. 2 sub-species.

(a). ♂ upf lower spot in space 1b very elongate and much larger than the upper spot: cell spot and spot in space 2 overlapping. ♀ upf spots in space 1b sub-equal: cell spot and spot in space 2 separated. ♂ F 18 mm.

Sub-sp. **tamyris** Mabille 1903: ♀ Amazons: type B.M. ♀ fig Seitz.
B.M. 3 ♂ 1 ♀ Br Guiana. 1 ♂ Fr Guiana. 2 ♂ Ecuador. 1 ♂ Peru (Chambireyacu). 14 ♂ 7 ♀ Amazons (Pará. Obidos. Santarem. Itaituba). 3 ♂ Matto Grosso.

(b). ♂ upf lower spot in space 1b not elongate = upper spot: cell spot and spot in space 2 not overlapping. ♂ F 20 mm.

Sub-sp. **tamba** nov: ♂ Iquitos: G. Klug: May 1932: type B.M.
B.M. 2 ♂ 1 ♀ Upper Amazons (Iquitos. Tonantins). 1 ♂ Minas Geraes.

E.5. COGIA Butler 1870: type *hassan* Butler: sole species included.

Synonyms. *Phoedinus* Godman & Salvin 1894: type *caicus* Herrich-Schäffer, fixed by authors: homonym (Dupont 1834).

Anaperus Mabille & Boullet 1916: to replace *Phoedinus*: homonym (Trosche 1846).

Caicella Hemming 1934: to replace *Anaperus*.

A comparatively compact genus with the same type of genitalia and with an apical spot present in space 9 F. Antennae = ½ costa, but shorter in *grandis*: apiculus shorter than the club and half the nudum on the club. Palpi generally short, but longer in *caicus*. Wing shape variable: in *hassan* the wings are not produced, but generally, particularly in *hippalus*, the tornus H is much produced. ♂ without a costal fold: all but the last two species have a hair tuft arising from near the base in space 1b: the tuft is generally short and brown, but is long and whitish in the first four species. Uncus without side processes.

1a (5a). ♂ hair tuft uph from near base of space 1b is long, recumbent, white or pale yellow.

1b (3a). Unh with narrow white markings on a dark ground. Above, unmarked, except for faint apical spots upf.

1 (2). Unh white submarginal line waved.

hassan. 2 sub-species.

(a). Unh white central and basal markings irregular and blotched. ♂ F 15 mm.

Sub-sp. **hassan** Butler 1870: ♀ Santarem: type B.M. Fig in Seitz is of *evansi*.

Synonym. *freudeae* Williams & Bell 1931: ♂ Dutch Guiana: figured ♂ and genitalia.

B.M. 4 ♂ 4 ♀ Amazons (Pará. Santarem). 1 ♂ 2 ♀ Pernambuco (Iguarasu).

(b). Unh all white lines narrow, separated. ♂ F 13 mm.

Sub-sp. **evansi** Bell 1937: ♂ Bolivia, Santa Cruz: fig genitalia. Fig in Seitz as *hassan*.

B.M. 3 ♂ 2 ♀ Bolivia (Santa Cruz). 2 ♂ Goyaz. 3 ♂ 1 ♀ Matto Grosso. 2 ♂ Paraná.

2 (1). Unh all lines regular and sharply defined: veins pale brown. Unf with a grey band decreasing from apex to mid termen. Cuiller deeply incised. ♂ F 13 mm.

abdul Hayward 1946: ♂ Misiones, Argentine: genitalia figured. Fig Hayward 1948, ♂ and genitalia.
B.M. 2 ♂ 3 ♀ Matto Grosso.

3a (1b). Unh not marked with white lines.
3 (4). Unh, and also upf, the narrow dark bands from below are more or less apparent.

cajeta. 2 sub-species.
(a). Upf with hyaline spots as in *hippalus*. Above, rather pale brown, dark bands conspicuous. ♂ F 23 mm.

Sub-sp. **cajeta** Herrich-Schäffer 1869: ? loc. Fig Godman & Salvin, ♂ and genitalia: Seitz.
Synonym. ? *thedea* Dyar 1912: ♀ Mexico.
B.M. 7 ♂ 1 ♀ Mexico (Jalapa. Tecapa).
(b). Upf hyaline spots absent or vestigial. ♂ F 21 mm.

Sub-sp. **eluina** Godman & Salvin 1894: ♂ Guatemala: Type B.M.: figured. Fig Seitz.
B.M. 6 ♂ Mexico (Yucatan. Guerrero). 5 ♂ 1 ♀ Guatemala. 1 ♂ Salvador. 1 ♂ Nicaragua. 1 ♂ Costa Rica.

4 (3). Uph the broad dark bands from unh not visible. Upf unmarked except for 4 apical spots. Unh with mauve scaling between the bands. ♂ F 18 mm.

troilus Mabille 1897: ♂ Bolivia: type B.M.
B.M. 7 ♂ Bolivia (Chulumani. Rio Tanampaya).

5a (1a). ♂ uph without a long white hair tuft.
5b (11a). ♂ uph with a short erect brown hair tuft from near the base of space 1b.
5c (8a). Antennal shaft chequered.
5 (6a). Tornus H not produced, dorsum = costa. Upf only a small upper spot in cell and no spot on costa above it: 4 apical spots and 4 small discal spots in spaces 2 to 5, some of which may be absent. Unh alternating dark bands well marked: border not paler. Cilia brown. Uncus very broad, scalloped at tip. Cuiller bifid. ♂ F18 mm.

punctilia Plötz 1882: Santarem: copy of Plötz's unpublished fig in B.M. Fig Seitz is *Cabares potrillo*.

Synonym. *helenus* Mabille 1897: Brazil: type B.M.
B.M. 3 ♂ 1 ♀ L. Amazons (Pará. Santarem). 1 ♂ Goyaz.

6a (5). Tornus H produced, dorsum > costa.
6 (7). End of uncus bluntly pointed: cuiller bifid. F cell spot continuous across cell.
hippalus. 4 sub-species.
(a). H cilia brown. F markings narrow. ♂ F 17 mm.
Sub-sp. **outis** Skinner 1894: ♂ Texas. Fig Skinner 1911: Holland: genitalia by Lindsey, Bell & Williams.
B.M. 1 ♂ 4 ♀ Texas (Vickery. Kerr County).
(b). H cilia white. F spots large. ♂ F 21 mm.
Sub-sp. **hippalus** Edwards 1882: ♀ Arizona. Fig Seitz: Holland: genitalia by Lindsey, Bell & Williams.
Synonym. *gila* Plötz 1886: ♂ Arizona.
B.M. 44 ♂ 10 ♀ Arizona. 5 ♂ Mexico (Guerrero).
(c). Like *hippalus*, but darker and hyaline spots F much reduced. ♂ F 20 mm.
Sub-sp. **hiska** nov: ♂ Costa Rica, Corillo: type B.M. Fig Godman & Salvin, ♂ and genitalia as *hippalus*.
B.M. 7 ♂ Mexico (Atoyac, Vera Cruz) 2 ♂ Guatemala. 2 ♂ 2 ♀ Costa Rica.
(d). F hyaline markings large. Unh brown, no white scaling, dark bands conspicuous. Cilia brown. ♂ F 22 mm.
Sub-sp. **hester** nov: ♂ Venezuela, Merida: type B.M.
B.M. 1 ♀ Colombia. 2 ♂ 1 ♀ Venezuela. 1 ♀ Pernambuco.

7 (6). End uncus divided: cuiller undivided. Like *hippalus hiska*, but F spots narrow, cell spot divided into 2 small spots: spot in space 2 narrow, oblique. Cilia white in interspaces along upper half of termen on H and up to vein 5 F. Below, as *hiska*. ♂ F 19 mm.
azila nov: ♂ Bolivia, Santiago de Chiquitos: August 1902: J. Steinbach.
B.M. Only the type.

8a (5c). Antennal shaft not chequered.
8 (9a). H cilia white. Markings as in *hippalus*. Palpi longer than usual. H tornus rounded. ♂ F 18 mm.
caicus. 2 sub-species.
(a). Upf markings complete.

Sub-sp. **moschus** Edwards 1882: Arizona. Fig Seitz: Holland: genitalia by Lindsey, Bell & Williams, as *caicus*. B.M. 51 ♂ 6 ♀ Arizona. 1 ♂ "California". 8 ♂ Mexico (N. Sonora).

(b). Upf darker, markings reduced, cell spot usually only an upper dot.

Sub-sp. **caicus** Herrich-Schäffer 1869: ? loc Fig. Godman & Salvin, ♂ and genitalia.

Synonym. *schaefferi* Plötz 1882: to replace *caicus*, wrongly considered to be a homonym.

B.M. 4 ♂ Mexico (Orizaba, Guerrero). 3 ♂ 3 ♀ Guatemala.

9a (8). H cilia brown, Unh termen darkened. Wings produced.

9 (10). Upf without discal spots. Unh very variable: may be entirely black with a broad grey border, or with alternating black and grey bands, the paler areas being more or less mottled with brown. ♂ F 19 mm.

calchas Herrich-Schäffer 1869: ? loc. Fig Seitz: genitalia by Godman & Salvin: Hayward 1948, ♂ and genitalia.

Synonyms. *terranea* Butler 1874: ♀ Costa Rica: type B.M.: figured.

anacreon Plötz 1882: for *calchas* (no descr.)

B.M. 23 ♂ 18 ♀ Mexico. 10 ♂ 10 ♀ Guatemala. 6 ♂ 6 ♀ Honduras. 1 ♀ Salvador. 4 ♂ 4 ♀ Nicaragua. 9 ♂ 9 ♀ Costa Rica. 8 ♂ 8 ♀ Panama. 7 ♂ 7 ♀ Colombia. 8 ♂ 8 ♀ Venezuela. 9 ♂ 9 ♀ Trinidad. 1 ♂ Jamaica. 4 ♂ 4 ♀ Br Guiana. 7 ♂ 3 ♀ Bolivia. 8 ♂ 12 ♀ Lower Amazons. 1 ♂ 1 ♀ Pernambuco. 4 ♂ 4 ♀ Matto Grosso. 11 ♂ 5 ♀ S. Brazil. 8 ♂ 8 ♀ Paraguay. 5 ♂ 5 ♀ Argentine.

10 (9). Upf with more or less developed discal hyaline spots, from a dot in space 3 to large spots in cell, spaces 2 and 3. Unh black with vague small markings and a broad grey border. Antennae unusually short, about one-third length of costa. Genitalia abnormal, uncus tapered and cuiller of clasp deeply excavate. ♂ F 23 mm.

grandis Riley 1921: ♂ Matto Grosso: type B.M.

B.M. 1 ♀ Goyaz. 2 ♀ Minas Geraes. 2 ♂ 3 ♀ Matto Grosso.

11a (5b). ♂ uph no hair tuft. Uncus and antennae as in *hassan* and *hippalus*. F with 4 apical spots as in rest of genus.

11 (12). Above, dark brown, dark markings faint, hyaline discal spots faint or absent. Unh dark brown, dark bands absent, a postdiscal row of paler brown spots. ♂ F 13 mm.

aventinus Godman & Salvin 1894: ♂ Mexico: type B.M.: figured.

Synonym. *bistor* Dyar 1926: ♀ Mexico (fide Bell 1942).

B.M. 5 ♂ 1 ♀ Mexico (Guerrero. Acapuico).

12 (11). Above, pale brown with a faint purple flush. Upf hyaline spots conspicuous, 2 in cell, double spot above mid costa; large quadrate spots in spaces 2 and 3; 4 apical spots: small upper and lower spots in space 1b: dark bar at end of cell. Uph dark bar at end of cell: postdiscal and submarginal dark bands. Unh paler with additional dark basal and sub-costal spots. ♂ F 17 mm. (second specimen 15 mm.).

mala nov: ♂ Guatemala: A. Hall: July 1904: type B.M.

B.M. 2 ♂ Guatemala.

E.6. TELEMIADES Hübner 1819: type *avitus* Stoll, fixed by Scudder 1875.

Structurally a compact genus defined by uniform type of uncus: the long apiculus to the antennae, nudum 6/16: the short, porrect palpi: and the presence of the lower radial veinlet to the origin of vein 4 F. Superficially there is a vast difference between *centrites* and *amphion*, but their generic affinity seems beyond dispute. Most species have a costal fold in the ♂.

1a (10a). F without conspicuous hyaline spots.

1b (4a). ♂ upf no costal fold.

1c (3). Upf no apical hyaline spots.

1 (2). Above and below conspicuously purple glossed, dark markings faint. ♂ F 21 mm.

delalandei Latreille 1824: ♀ Brazil: type B.M. Fig Hayward 1948, ♂ and genitalia as *purpurascens*.

Synonyms. *panthea* Hewitson 1868: ♂ Amazons: type B.M.

amaurus Mabille 1889: ♂ Massuary: figured: type B.M.
lucina Schaus 1913: ♂ Costa Rica: figured.
B.M. 1 ♂ Guatemala. 1 ♂ Nicaragua. 3 ♂ 1 ♀ Venezuela. 1 ♂ 2 ♀ Peru (Chambireyacu). 18 ♂ 23 ♀ Upper Amazons (Iquitos. Tapajos. Putumayo. Ega. Pebas. Teffe. R. Madeira. Santarem). 2 ♂ 2 ♀ Pará.

2 (1). No purple gloss: dark markings conspicuous. Unh ochreous-brown, turning yellower towards dorsum, dark subtornal spot conspicuous. ♂ F 16 mm.
litanicus Hewitson 1876: ♂ Amazons: type B.M.
B.M. 8 ♂ 6 ♀ Pará.

3 (1c). F with 3 hyaline apical spots. Very dark brown, dark bands faint. Below, dark brown: sparse ochreous scaling at apex F and on H, where the subtornal dark spot is conspicuous. ♂ F 15 mm.
vansa nov: ♂ Rio Demerara, Br Guiana: type B.M.
B.M. Only the type.

4a (1b). ♂ upf with a costal fold. F with 1 to 3 apical spots.
4 (5a). Unh tornal half of termen broadly ochreous, recalling *Astraptes anaphus*. ♂ above, very dark brown, obscuring the dark bands, which are conspicuous in the lighter ♀. ♂ F 23, ♀ 28 mm.
centrites. 3 sub-species.
(a). ♂ uph tornal area orange to a width of 2 mm.
Sub-sp. **gallius** Mabille 1888: ♂ Chiriqui: figured. Fig Seitz.
Synonym. *chrysorrhoea* Godman & Salvin 1893: ♂ Panama: type B.M.: figured.
B.M. 2 ♂ Panama.
(b). ♂ uph only a few scales at the tornus orange and cilia orange to end of vein 2: in ♀ tornal cilia mixed yellow and brown. Unh broad tornal area extends to vein 6, orange in ♂, yellow in ♀.
Sub-sp. **contra** nov: ♂ Chimbo, Ecuador: type B.M.
B.M. 1 ♂ type. 1 ♀ Balzapamba, Ecuador.
(c). Uph cilia at tornus brown. Unh tornal yellow area shaded brown in ♂, clearer in ♀.
Sub-sp. **centrites** Hewitson 1870: ♀ Ecuador: type B.M.
B.M. 2 ♂ 1 ♀ E. Ecuador (de Baños à Canelos).

5a (4). Unh no tornal ochreous area.

5b (9). ♂ above not overlaid with golden hairs. Uncus broad-ended.

5 (6a). Large, ♂ F 22, ♀ 27 mm. Unglossed brown above and below. Palpi and pectus below yellowish-brown. Below, dark bands irregular, but continuous and not macular, as is usual: unh no dark subtornal lobe. The B.M. ♂ and 1 ♀ have 3 apical spots F, the lower one shifted outwards: in the 2nd ♀ the lower spot is absent: in the 3rd ♀, from Espirito Santo, in addition to the three usual well-marked apical spots, there are two small hyaline spots in each of spaces 2 and 3, recalling *penidas* and closely resembling the figure in Jones' Icones of *vespasius* in size and appearance. Uncus with the two side processes on either side of equal height.

vespasius Fabricius 1793: Indiis: fig Jones Icones.

Synonyms. *curtius* Fabricius 1793: Surinam: fig Jones Icones.

phlius Plötz 1882: ♀ Brazil: copy of Plötz's unpublished plate in B.M.

B.M. 1 ♂ 3 ♀ S. Brazil (São Paulo. Paraná. Espirito Santo).

6a (5). ♂ F not more than 20 mm. Above, more or less purple-glossed: unh bands macular.

6b (8). Uncus, upper side process curved, lower process very short.

6 (7). Uncus, upper side process reaches to end of uncus: aedoeagus thin, long and serrate at the side: end of cuiller broadly rounded. Above, with a faint purple gloss. Below, ♂ uniform brown, markings slightly darker: dark subtornal lobe unh absent or faint: ♀ light brown and unh grey scaled, intensely on the dorsal quarter, sparsely elsewhere, and the tornus darkened. ♂ F 20 mm.

squanda nov: ♂ Rio de Janeiro, Lake Sacuaresma: P. Germain: Aug–Sept 1884: type B.M. Fig Hayward 1948, ♂ and genitalia as *purpurascens*.

B.M. 2 ♂ Br Guiana. 1 ♂ Bolivia. 1 ♀ Ega, Amazons. 1 ♂ Pará. 1 ♂ Goyaz. 1 ♂ Rio.

7 (6). Uncus, upper side process not reaching end of uncus: aedoeagus stout, not serrate at side: clasps asymmetric, cuiller narrow-ended. Above, very dark brown, markings faint. Below, paler brown, dark bands and subtornal spot conspicuous: unf dark cell spot has a semi-hyaline centre. ♂ F 17 mm.

trenda nov: ♂ Surinam, interior: W. Ellacombe: Sept 1922. B.M. Only the type.

8 (6b). Uncus, the two side processes short, straight, subequal, one above the other: cuiller with rounded end and inwardly tapered to a sharp point. Unh dark subtornal spot inconspicuous. ♂ F 18 mm.

nicomedes. 2 sub-species.

(a). Unh dull ochreous in ♂, bright ochreous in ♀. Inward projection of cuiller short.

Sub-sp. **nicomedes** Möschler 1878: ♂ Colombia: figured. Synonyms. *meris* Plötz 1886: ♂ Colombia. Fig Seitz. *punctatus* Mabille & Boullet 1916: ♂ Fr Guiana.
B.M. 1 ♂ Guatemala. 1 ♂ 1 ♀ Fr Guiana. 1 ♂ Surinam. 1 ♀ Pebas, Amazons. 1 ♀ Santarem. 2 ♂ 4 ♀ Pará.

(b). Unh ♂ reddish-brown, some sparse grey scaling towards tornus: ♀ ochreous, overlaid grey scaling, obscuring the markings. Inward projection of cuiller elongate.

Sub-sp. **brazus** Bell 1949: ♂ Santa Catharina: fig of genitalia. Synonym. *nicomedes* Plötz 1882: Brazil. Fig Seitz. Homonym (Möschler 1878).
B.M. 1 ♂ Minas Geraes. 1 ♂ Matto Grosso. 5 ♂ 2 ♀ Rio. 3 ♂ 2 ♀ Rio.

9 (5b). ♂ above, overlaid golden hairs. ♀ purple-brown with a purple gloss. Unh dark reddish-brown in ♂ and markings faint. Uncus narrow-ended. ♂ F 20 mm.

epicalus. 3 sub-species.

(a). Unh dorsal half densely white scaled in the ♀ and the ♂ figured by Godman & Salvin ex coll Staudinger, but not in the single ♂ in the B.M., the genitalia of which differ from *epicalus* in having the lower side process of the uncus broad and rounded instead of narrow and pointed as usual.

Sub-sp. **megallus** Mabille 1888: ♀ W. Colombia: figured. Fig Godman & Salvin: Seitz.

B.M. 1 ♂ 3♀ Mexico. 1♀ Honduras.

(b). Unh the white scaling absent or faint. Uncus with a single side process: clasps asymmetric, left like *megallus*, right like *epicalus*. ♂ above, very dark, with conspicuous dark markings: below, nearly black, with no markings visible.

Sub-sp. **sila** nov: ♂ Venezuela: type B.M.

B.M. 1 ♂ Nicaragua. 1 ♂ Colombia (Cundinamarca). 1 ♂ Venezuela. 1 ♂ Ecuador (La Chima, Los Rios).

(c). Uncus with 2 equal, similar side processes. ♂ above, bright ferruginous or golden brown, but very variable.

Sub-sp. **epicalus** Hübner 1819: for Cramer's figure plate 354 E of *avitus* (nec 354 D): ? loc.

Synonyms. *crameri* Felder 1862: for Cramer's fig 354 E.
phasias Hewitson 1867: ♂ America: type B.M. Fig of genitalia by Godman & Salvin.
arcturus Herrich-Schäffer 1869: ? loc. Copy of Plötz's unpublished fig in B.M.
? *potomoni* Ehrman 1907: ♀ Venezuela. Fig Holland 1927.
diores Mabille & Boullet 1912: ♂ S. America: type B.M.
obscurus Mabille & Boullet 1912: ♂ Fr Guiana.

B.M. 1 ♂ Chiriqui. 1 ♀ Br Guiana. 1 ♂ Trinidad. 1 ♂ Surinam. 3 ♂ 4 ♀ Fr Guiana. 1 ♂ 1 ♀ Peru (Chanchamayo. Moyabamba). 4 ♂ Bolivia (R. Songo. Yungas, La Paz). 6 ♂ 2 ♀ Amazons (S. Paulo de Olivenca. Santarem. Pará). 1 ♂ 1 ♀ Pernambuco. 1 ♂ Bahia. 1 ♀ Minas Geraes. 2 ♂ 2 ♀ S. Brazil (Rio).

10a (1a). F with conspicuous hyaline spots. ♂ with costal fold upf.

10 (11a). Upf spot in space 2 widely separated from the cell spot (*antiope tosca* aberrant). Very variable. Upf spots in cell and space 2 consist of oblique streaks, which may be conjoined. ♀ unh basal half may be whitened. ♂ F 23 mm. Genitalia near *epicalus*.

penidas Hewitson 1867: ♂ Amazons: type B.M. The type is an abnormal, very pale specimen: fig Seitz and Mabille & Boullet 1912. A normal specimen, ♂, is fig Seitz as *littera*.

Synonyms. *ceramina* Herrich-Schäffer 1869: ♀ Fig Seitz.
mygdon Möschler 1876: ♀ Surinam: figured.

uncinata (Hopffer MS) Plötz 1882 = *ceramina*: Surinam.
aesopus Plötz 1882: ♂ "Java" = *penidas*.
megalloides Schaus 1902: ♂ Peru.
hoyti Weeks 1906: ♀ Venezuela. Fig Weeks 1911.
B.M. 1 ♂ Colombia. 1 ♂ 1 ♀ Venezuela. 2 ♂ 2 ♀ Br Guiana. 8 ♂ 7 ♀ Fr Guiana. 1 ♂ 1 ♀ Ecuador (La Chima. Los Rios). 1 ♂ Peru (*megalloides* paratype). 1 ♂ 1 ♀ Bolivia (Reyes. Cochabamba). 3 ♂ 5 ♀ Upper Amazons (Iquitos. Teffe. Tonantins. S. Paulo de Olivenca. Itaituba). 8 ♂ 9 ♀ Lower Amazons (Santarem–Pará). 1 ♂ Bahia. 1 ♂ Maranham. 1 ♂ 4 ♀ S. Brazil.

11a (10). Upf spot in space 2 (except in aberrant forms) quadrate, placed under and contiguous to the cell spot.
11b (14). H not conspicuously produced at end of vein 3.
11c (13). Upf no spot on costa above the cell spot.
11 (12). ♂ above, shaded tawny, with yellow hyaline spots F: ♀ brown, grey scaled, with white hyaline spots F. Upf 3 apical spots, equal and in a straight line. ♂ F 18 mm.

avitus Stoll 1781: ♂ ? loc: figured, plate 354 D (nec E which is *epicalus*). Fig Seitz: genitalia by Godman & Salvin.
Synonyms. *lurideolus* Mabille 1877: ♂ Brazil: type B.M.
lamus Mabille 1877: ♂ Brazil: type B.M.: figured.
xantho Hayward 1939: ♂ Argentine: genitalia figured. Fig Hayward 1948, ♂ and genitalia.
B.M. 6 ♂ 4 ♀ Mexico. 1 ♀ Honduras. 1 ♂ Costa Rica. 1 ♂ Colombia. 13 ♂ 2 ♀ Amazons (Teffe. Tapajos. Santarem. Pará).

12 (11). ♂ ♀ above, clothed with olive grey scales, hyaline spots white. Upf with 3 irregular apical spots.

antiope. 2 sub-species.
(a). Upf central spots large and contiguous. ♂ F 17 mm.
Sub-sp. **antiope** Plötz 1882: ♂ Colombia.
B.M. 1 ♀ Nicaragua. 1 ♂ 1 ♀ Colombia. 1 ♂ Bahia. 1 ♂ Rio. 1 ♂ 1 ♀ Paraná.
(b). Upf spots much reduced and separated, particularly those in spaces 2 and 3 in ♂, spot in space 2 crescentic and only a dot in space 3. Smaller, ♂ F 16 mm.

Sub-sp. **tosca** nov: ♂ Ega, Amazons: type B.M.
B.M. 3 ♂ 1 ♀ Upper Amazons (Iquitos. Ega. S. Paulo de Olivenca). 2 ♂ 4 ♀ Pará.

13 (11c). Upf with a spot on the costa above the cell spot. Cuiller of clasp sub-specifically variable.

amphion. 5 sub-species.

(a). Upf central spots separated in ♂: 3 irregular apical spots. ♂ F 18 mm.

Sub-sp. **fides** Bell 1949: ♂ Panama: genitalia figured.
B.M. 3 ♂ 1 ♀ Mexico. 1 ♂ Guatemala. 1 ♂ 1 ♀ Honduras. 3 ♂ 1 ♀ Nicaragua. 2 ♂ Costa Rica. 2 ♂ Panama. 2 ♂ Colombia. 2 ♂ Ecuador (La Chima. Zaruna). 2 ♂ 1 ♀ Itaituba, Amazons.

(b). Small, ♂ F 15 mm. Upf markings similar, but much reduced: in ♂ up to 3 apical dots, dot mid costa, none in cell, sometimes dot in space 2 and there may be one in space 3. ♀ with spots complete, but small.

Sub-sp. **pekahia** Hewitson 1868: ♀ Venezuela: type B.M.
B.M. 1 ♂ Colombia (Lake Sapatoza). 3 ♂ 2 ♀ Venezuela.

(c). ♂ F 16 mm. Darker than *fides*. Upf normally with only 2 apical spots in spaces 7 and 8.

Sub-sp. **amphion** Hübner 1826: ♂ "W. Indies": figured. Fig Seitz, plate 168f: Hayward's figs 1933 and 1948 are *marpesus*.
Synonyms. *compressa* Möschler 1876; ♀ Surinam: figured.
zethos Plötz 1882: ♂ Pará.
buffumi Weeks 1906: ♂ Venezuela. Fig Weeks 1911.
B.M. 6 ♀ Br Guiana. 5 ♂ 7 ♀ Fr Guiana. 10 ♂ 3 ♀ Amazons (Teffe. Santarem). 15 ♂ 15♀ Pará. 1 ♂ 1 ♀ Maranham. 1 ♂ Bolivia (Buenavista).

(d). Large and dark, ♂ F 18 mm. Upf 1 or 2 apical spots: central spots contiguous in ♂ and ♀: spot mid costa double, extending above vein 12.

Sub-sp. **misitheus** Mabille 1888: Chanchamayo: figured.
B.M. 2 ♂ 5 ♀ Ecuador (Paramba. Rio Pastaza). 1 ♂ Colombia (Rio Negro). 1 ♂ 2 ♀ Peru (Moyabamba. Tarapote. Yahuarmayo). 7 ♂ Bolivia (Cochabamba. Yungas, La Paz). 1 ♀ Bahia. 1 ♂ Minas Geraes. 1 ♀ Rio. 3 ♂ Paraguay.

(e). ♂ F 18 mm. greyer. Upf spots as in *misitheus*, but with 3 conspicuous apical spots in line, spot in space 6 small. Dark banding more continuous and conspicuous, particularly the broad postdiscal band upf.

Sub-sp. **marpesus** Hewitson 1876: Brazil. Fig as *amphion* by Seitz, plate 168e and Hayward 1933 and 1948.

B.M. 4 ♂ 1 ♀ Bahia. 1 ♂ Minas Geraes. 8 ♂ 4 ♀ S. Brazil (Rio. São Paulo. Paraná. Espirito Santo. Santa Catharina). 2 ♂ Paraguay.

14 (11b). H conspicuously produced at the end of vein 3, as well as at the end of vein 1b. Upf 3 conspicuous apical spots in line: central spots separated. ♂ F 17 mm: no costal fold.

laogonus. 2 sub-species.

(a). Upf no spot on costa above the cell spot.

Sub-sp. **nicola** Plötz 1882: Pará. Fig Seitz.

B.M. 1 ♂ Fr Guiana. 1 ♂ Peru. 7 ♂ 2 ♀ Amazons (Santarem).

(b). Upf with a spot on costa above the cell spot.

Sub-sp. **laogonus** Hewitson 1876: Brazil. Fig Hayward 1948, ♂ and genitalia.

Synonym. *simplicius* Hayward 1933: ♂ Argentine: figured 1934.

B.M. 2 ♂ Argentine (Posadas).

E.7. PYRDALUS Mabille 1903: type *corbulo* Stoll; sole species included.

Genitalia, palpi and antennae as in *Telemiades*. ♂ upf with a costal fold: uph with a long hair pencil overlying a polished area in space 7 from base to half-way to termen, correlated to a similar area along dorsum unf with an oval brand over vein 1. ♀ H distance of origin of vein 2 from end cell = or > than width cell: in *Telemiades* < width cell.

Single species. Above unmarked except for the usual dark bands and 2 or 3 apical hyaline dots F. ♂ F 20 mm.

corbulo. 2 sub-species.

(a). ♂ F costa more rounded: wings less produced. Above central and discal dark bands continuous, well separated. Uph hair pencil yellow: unf brand smaller and brown.

Unh costal area brown, rest dull ochreous, discal dark band faint, no tornal dark spot. ♀ above, dark bands narrower, more conspicuous: unh wing below the dark costal area is yellower and the band is barely visible.

Sub-sp. **cora** nov: ♂ Honduras, Dyson 1845: type B.M.

B.M. 1 ♂ 1 ♀ type loc.

(b). ♂ wings more produced, wing shape of *Telemiades penidas*. ♂ upf dark bands broad, coalesced: uph with a steely blue sheen, hair pencil brown and unf brand long and white. Unh uniform brown, dark bands narrow, well marked, tornal dark spot present. ♀ above, with a violet sheen broadly along termen F and over most of H, dark bands visible. Unh light ochreous brown, slightly darker towards costa, discal band faint.

Sub.-sp. **corbulo** Stoll 1781: ♂ Surinam, pl 354A. Seitz's fig pl 174e is incorrect and probably = *Telemiades penidas*. Genitalia fig Williams & Bell 1933, pl 4/3. The genitalia fig by Lindsey 1925, pl 27/2 appertains to *Anastrus obscurus* Hübner.

Synonyms. *praestes* Hewitson 1876: ♂ Cayenne: type B.M. *insulsus* Draudt 1922: ♀ S. Brazil: figured.

B.M. 8 ♂ 2 ♀ Fr Guiana. 2 ♀ Br Guiana. 1 ♂ 2 ♀ Peru (Amazonas). 1 ♀ Bolivia. 8 ♂ 3 ♀ Lower Amazons. 2 ♂ Upper Amazons). 1 ♀ Matto Grosso.

E.8. MIMIA Evans (p. 7): type *phidyle* Godman & Salvin: fixed by author.

Differs from *Telemiades* in having the mid and hind tibiae spined. Antennae = ½ costa, nudum 9/13: shaft plain. Palpi short, porrect. Legs fringed. Wings produced. F the radial veinlet is well marked, reaching the cubitus nearer to vein 3 than to vein 4. ♂ with a narrow costal fold.

Single species. ♂ F 23 mm. Above gleaming golden-brown, recalling *Gorgopas agylla* and *Achlyodes pallida*. Unh dark brown with a faint dark band.

phidyle. 2 sub-species.

(a). ♀ upf with a 3 equal apical spots: a black circular spot near end cell, recalling *Cyclosemia*. Unf apical half unmarked yellow, recalling *Bolla cylindus*.

Sub-sp. **phidyle** Godman & Salvin 1894: ♀ Panama: figured: type B.M. Fig Seitz.
B.M. Only the type.
(b). ♂ upf apical spots in spaces 7 and 8 minute, the spot in space 6 unusually large: a black bar near end cell: as in *phidyle* the narrow dark discal band ends at vein 4 and is not continued to the apical spots, recalling *Telemiades vespasius*. Unf outer half pale yellowish-brown, with the dark discal band as on upf.

Sub-sp. **pazana** nov: ♂ Bolivia, Yungas La Paz: 3,500 ft.: H. Rolle 1902: type B.M.
B.M. 3 ♂ Bolivia, type loc.

E.9. ECTOMIS Mabille 1878: type *cythna* Hewitson: sole species included was *adoxa* Mabille, which is a synonym of *cythna*.

Synonym. *Basslerodea* Bell 1940: type *mida* Bell, fixed by author.

F cell < dorsum. Antennae < ½ costa, bent beyond middle of club: nudum 13/12: apiculus obtuse. H lobed. Palpi short, porrect. ♂ secondary sexual characters abnormal: F vein 2 arises from base: unf a double hair tuft over a speculum about basal quarter of wing: H greatly produced at base costa and lapped over.

Single species.

cythna. 2 sub-species.
(a). ♂ upf with a hyaline white band from just below vein 2 to vein 12, filling base of space 3. Unf band diffused white, extending narrowly to costa and mid space 1b. Otherwise unmarked dark brown. Head dark green, ♂ F 17 mm.

Sub-sp. **cythna** Hewitson 1878 (April): ♂ ? loc: type B.M.
Synonyms. *adoxa* Mabille 1878 (July): ♂ ? loc: type B.M. *mida* Bell 1940: ♂ Iquitos: genitalia figured.
B.M. 5 ♂ Br Guiana. 1 ♂ Surinam. 2 ♂ Fr Guiana. 1 ♂ Upper Amazons (S. Paulo de Olivenca). 2 ♂ no loc.
(b). Exactly as *cythna*, but the white band is absent. Unf some white scaling on vein 2 and base of space 3 outside the speculum. ♂ F 17 mm.

Sub-sp. **ega** nov: ♂ Ega, Amazons: H. W. Bates: type B.M.
B.M. Only the type.

E. 10. NERULA Mabille 1888: type *fibrena* Hewitson: fixed by Watson 1893 as *nautes*, which is a synonym of *fibrena*.

F cell as long as dorsum. Antennae = ½ costa: hooked beyond mid club: nudum 8/11. Palpi short, porrect. Wings produced. ♂ uph with a radiating yellow hair tuft from near base of vein 1b: also (in type species) a dark brown erect tuft from above basal half of vein 8, and vein 7 arises nearer base than end of cell.

1 (2). ♂ uph with a conspicuous white tornal area: Unh ♂ ♀ with whitened areas. ♂ F 17 mm.

fibrena Hewitson 1877: ♂ Venezuela: type B.M. Fig Seitz.
Synonym. *nautes* Mabille 1888: ♂ Brazil: figured.
B.M. 1 ♂ Venezuela. 6 ♂ 1 ♀ Amazons (Teffe. Itaituba. Obidos. Santarem).

2 (1). ♂ uph unmarked: upf as *fibrena*, but all spots very small. Unf brown, dorsum paler: yellow diffuse scales in cell and broadly before termen. Unh brown with highly irregular narrow zigzag bands of dense yellow scaling. ♂ uph without the costal hair tuft. ♂ F 12½ mm.

tuba nov: ♂ Itaituba, Amazons: type B.M.
B.M. Only the type.

E.11. CONOGNATHUS Felder 1862: type *platon* Felder: sole species included.

Synonyms. *Garga* Mabille 1889: type *olena* Mabille: sole species included.

Neonoma Watson 1893: to replace *Conognathus*, which was considered, incorrectly, to be preoccupied.

A genus for a single aberrant species with a single pair of spurs on the hind tibiae and both the mid and hind tibiae spined. The hindwing is produced and strongly lobed. Antennae = ½ costa, angled beyond the thickest part of the club, nudum 9/11. Palpi porrect, rather long. F cell short.

Single species. ♂ F 18 mm. Upf with hyaline spots, narrow hour-glass spot in cell and 3 apical spots. Uph with pale yellow quadrate spots in spaces 6 and 7. Below with a yellowish central band and a double tornal spot in space 1b.

platon Felder 1862: ♂ Rio Negro: type B.M. Fig Seitz.
Synonym. *olena* Mabille 1889: ♂ San Paulo: figured.
B.M. 1 ♂ Rio Negro (type). 1 ♂ Br Guiana. 2 ♂ Peru (San Gaban. R. Ucayali). 7 ♂ Amazons (Pebas, Iquitos. S. Paulo de Olivenca. Upper Putumayo. Solimoes).

E.12. ARTEUROTIA Butler and Druce 1872: type *tractipennis* Butler and Druce: fixed by authors.

A genus with a single species readily distinguished by its appearance and in having the mid and hind tibiae spined. The secondary sexual characters are peculiar: a large black area of modified scales at the apex upf and vein 7 rises midway between the base and the end of the cell. Antennae hooked beyond the thickest part of the club, nudum 6/12. Palpi rather long, porrect.

Single species. Above, grey with a black patch near the apex bearing on its outer edge 3 hyaline spots.

tractipennis. 2 sub-species.
(a). ♂ F 18 mm.
Sub-sp. **tractipennis** Butler & Druce 1872: ♂ Costa Rica: type B.M. Fig Butler 1874: Staudinger 1889: Godman & Salvin, ♂ genitalia: Seitz.
Synonym. *ribbei* Staudinger 1876: ♂ Chiriqui.
B.M. 21 ♂ 4 ♀ Mexico. 9 ♂ Guatemala. 5 ♂ Honduras. 3 ♂ 1 ♀ Nicaragua. 5 ♂ Costa Rica. 28 ♂ Panama. 1 ♂ Colombia. 2 ♂ Surinam. 1 ♂ Bolivia (Cochabamba).
(b). ♂ 12 mm. ♀ paler and brighter.
Sub-sp. **contractipennis** Mabille & Boullet 1916: ♂ Venezuela.
B.M. 14 ♂ 2 ♀ Venezuela (Margarita).

E.13. ERACON Godman & Salvin 1894: type *biternata* Mabille: fixed by Lindsey 1925.

Antennae longer than half costa: bent to a hooked apiculus beyond the thickest part of the club: nudum 11/11. Palpi short. Wings produced at apex F and tornus H.

♂ typically without a costal fold: no tibial tuft. Uncus undivided, slender: clasp broad. Type examined, by courtesy of Dr Hering of the Zoological Museum, Berlin: *clinias* is definitely congeneric with *biternata* and the genitalia are very alike.

1a (5a). F with a hyaline spot mid costa over the cell spots.
1b (3a). Uph brown with conspicuous dark bands. Upf with a black ocellus.
1 (2). Unh as uph, but paler. ♂ no costal fold. ♂ F 16 mm.

biternata Mabille 1889: ♂ Chiriqui: figured. Fig Godman & Salvin: Seitz.
B.M. None.

2 (1). Unh pale blue with a black border. F 18 mm.

jacobus Plötz 1884: Rio: copy of Plötz's unpublished fig in B.M. Fig Seitz.
B.M. None.

3a (1b). Uph without conspicuous dark bands. Upf no black ocellus. ♂ with costal fold.
3 (4). Uph with a narrow, white, central macular band, beyond which the wing is shaded light blue in the ♂: abdomen is similarly white banded. ♂ F 17 mm.

clinias Mabille 1878: ♂ Fr Guiana: type B.M. Fig in Seitz as *calendris*.
Synonym. *celendris* Hewitson 1878: ♂ Amazons: type B.M.
epipola Plötz 1882: ♂ Fr Guiana.
B.M. 1 ♂ Ecuador. 1 ♂ Br Guiana. 7 ♂ 4 ♀ Fr Guiana. 2 ♂ Upper Amazons (Pebas. St Paulo). 7 ♂ 1 ♀ Pará. 1 ♂ Matto Grosso.

4 (3). Uph dark reddish-brown with very faint dark bands. Upf and unf as *clinias*, but no blue scaling. Unh with small whitish spots, one mid cell, followed by a central and discal curved row from space 1c to space 7. Cilia H chequered brown and white. ♂ F 18 mm.

pebana nov: ♂ Pebas, Amazons: M. de Mathan: Nov–March 1880: type B.M.
B.M. Only the type.

5a (1a). Upf no spot mid costa over the cell spots.
5b (8). Upf with a black ocellus in cell.
5 (6a). Upf with a single apical hyaline spot: the ocellus usually with a single pupil. Unh brown with a tornal dark spot and 3 rows of yellow spots, which in ♀ tend to be conjoined into a large yellow area. ♂ with a costal fold. ♂ F 17 mm.

paulinus Stoll 1782: ♀ Surinam. Fig Seitz as *paullinus*.
Synonyms. *bufonia* Möschler 1878: ♂ Colombia. Fig Seitz.
parus Mabille 1888: ♀ Porto Cabello: figured.
B.M. 2 ♂ 2 ♀ Colombia. 1 ♂ Br Guiana. 1 ♂ 1 ♀ Fr Guiana. 1 ♂ 2 ♀ Ecuador (Cachabe). 2 ♂ 4 ♀ Upper Amazons (Iquitos. St Paulo. Upper Putumayo). 22 ♂ 21 ♀ Pará.

6a (5). Upf with 3 apical hyaline spots.
6 (7). Upf pale brown with dark bands: ocellus in cell bipupilled, no hyaline discal spots. Uph pale brown with dark bands. Unh with dark bands, rest of ground colour overscaled pale blue to white. ♂ F 16 mm: with costal fold.

problematica Williams & Bell 1940: ♂ Argentine: genitalia figured. Fig of genitalia by Hayward 1948.
B.M. None.

7 (6). ♀ Upf ocellus in cell outwardly flanked by a narrow hyaline white line across the cell followed by a hyaline dot at base of space 2: hyaline discal spots in spaces 2, 3, 4 and 5. Uph with a conspicuous whitish central area: unh as uph. ♀ F 16 mm.

onorbo Möschler 1882: ♀ Surinam: figured. Fig Seitz.
B.M. 1 ♀ Br Guiana. 1 ♀ Surinam.

8 (5b). Upf no black ocellus. Above ochreous brown with small hyaline spots upf and dark spots uph. Upf ⊃-shaped hyaline spot across cell, dot mid space 1b, spots in spaces 2 and 3, dots in spaces 4 and 5, apical spots in spaces 6, 7, 8.

mnemon. 2 sub-species.
(a). Upf base, most of uph and unh bright ochreous. ♀ F 16 mm.

Sub-sp. **mnemon** Schaus 1913: ♀ Costa Rica: figured.
B.M. None.

(b). Without such ochreous areas, uniform. Uph the dark spots faint. Unh similar to uph, duller. ♂ F 13 mm. ♂ with costal fold.

Sub-sp. **clada** nov: ♂ Maranham: Sept 1894: type B.M.
B.M. Only the type.

E.14. SPIONIADES Hübner 1819: type *artemides* Stoll: fixed by Scudder 1875.

Antennae = $\frac{1}{2}$ costa: shaft plain or faintly chequered: apiculus hooked beyond mid club, nudum 6/10: apiculus < club. Palpi short. F termen truncate at tornus from vein 4; apex not produced; cell long. H produced at tornus, vein 1a > vein 8. ♂ no costal fold: hind tibiae with a tuft entering a thoracic pouch. Uncus tapered, undivided, with short side processes: clasps asymmetric, no style. Upf sparsely blue powdered: with small hyaline spots: uph tornal area generally white or pale blue.

1a (3). Unh tornal half white.

1 (2). ♂ upf with hyaline cell streaks and a hyaline streak or double spot across space 2. Abdomen white banded at tip only.

abbreviata. 2 sub-species.

(a). ♂ F 18 mm. F angled at vein 4: H termen straight.

Sub-sp. **abbreviata** Mabille 1888: ♂ Chiriqui: figured. Fig in Seitz is of *anta*.
B.M. 1 ♀ Nicaragua. 1 ♂ Costa Rica. 1 ♀ Panama. 3 ♀ Colombia.

(b). ♂ F 20 mm. F angulation more pronounced. H angled at vein 4.

Sub-sp. **anta** nov: ♂ Bolivia: type B.M. Fig Seitz as *abbreviata*.
B.M. 3 ♂ 1 ♀ Ecuador (R. Pastaza. Zamora). 4 ♂ Peru (Marcapata. Chanchamayo. Chirimayo. La Merced). 7 ♂ Bolivia (Cochabamba. San Jacinto).

2 (1). ♂ upf with hyaline cell dots, but spots in space 2, if present, are not hyaline. Abdomen white banded centrally as well as at tip. ♂ F 17 mm.

artemides Stoll 1782: ♂ Surinam: figured. Fig Seitz: Godman & Salvin, ♂ and genitalia.
B.M. 2 ♂ Panama. 2 ♂ 1 ♀ Colombia. 2 ♂ Trinidad. 2 ♂ Br Guiana. 1 ♀ Surinam. 7 ♂ 1 ♀ Fr Guiana. 3 ♂ Peru (Tarapote. Chanchamayo). 1 ♂ Bolivia (Santa Cruz). 5 ♂ 4 ♀ Upper Amazons (Ega. Iquitos). 13 ♂ 2 ♀ Pará. 1 ♂ Maranham. 1 ♀ Minas Geraes. 2 ♂ Matto Grosso. 10 ♂ 1 ♀ S. Brazil (São Paulo. Espirito Santo).

3 (1a). Unh pale blue, with dark brown areas and markings. Uph ♂ tornal area pale blue: ♀ pale brown with white discal dots. ♂ F 15 mm.
libethra Hewitson 1868: ♀ St. Paulo, Amazons: type B.M. Fig Hewitson 1871.
Synonym. *pelia* Mabille 1888: ♂ Lower Amazons: figured.
B.M. 1 ♂ 1 ♀ Br Guiana. 1 ♂ Surinam. 5 ♂ 3 ♀ Fr Guiana. 4 ♂ Peru (Moyabamba. Tarapote). 8 ♂ 2 ♀ Bolivia (Coroico. Buenavista). 3 ♂ 1 ♀ Amazons (Iquitos. Upper Putumayo. S. Paulo de Olivenca).

E.15. MYCTERIS Mabille 1877: type *crispus* Herrich-Schäffer: sole species included was *caerula* Mabille, which is a sub-species of *crispus*.

Allied to *Nisoniades*, having similar secondary sexual characters: differing in respect of the antennae, palpi and facies. Antennae = ½ costa: nudum 18/11: club unusually long. Palpi very long, more than twice as long as the head: tapered, smooth, convergent, brown below. ♂ unf vein 7 from mid base and end cell: base of the vein surrounded by an oval glandular area, which appears uph as a brownish-white brand and is covered by a brown hair tuft springing from the base of the costa.

Single species. ♂ F 20 mm. Above velvet dark brown: upf with a row of conspicuous shining pale blue spots, large at apex, small and faint from space 4 to space 1b: continued on uph.
crispus. 2 sub-species.
(a). Unh tornal half pale leaden blue, unmarked.
Sub-sp. **caerula** Mabille 1877: ♂ Colombia: type B.M. Fig Seitz: Godman & Salvin, ♂ and genitalia as *caerulea*.

B.M. 1 ♂ Guatemala. 1 ♀ Nicaragua. 2 ♂ Panama. 9 ♂ Colombia. 8 ♂ Ecuador (Zamora. Paramba).

(b). Unh brown, dorsally paler, with faint dark discal spots and a subtornal spot.

Sub-sp. **crispus** Herrich-Schäffer 1870: Venezuela. Fig Seitz.

Synonyms. *cambyses* Hewitson 1878: ♂ Bolivia: type B.M. *pericles* Mabille 1903: ♂ Bolivia: type B.M.

B.M. 1 ♂ Fr Guiana. 3 ♂ Ecuador. 12 ♂ Peru (Chanchamayo. Chaquimayo. Cuzco. Ucayali. Pozuzo). 25 ♂ Bolivia (Cochabamba. Santa Cruz. R. Songo. Yungas, La Paz). 1 ♂ Matto Grosso. 1 ♂ Paraná. 1 ♂ Rio Grande.

E.16. ILIANA Bell 1937: type *romulus* Bell: fixed by author.

Superficially the type species resembles *Telemiades delalandei*, but vein 1a H is long, nearly as long as vein 1b, so that the tornus is not cut back; there is no sign of the branch from the median vein to the origin of vein 3 or 4, while the form of genitalia and of the antennal club differ materially. Three large, dark species have been included in the genus because of their similarity in general appearance. The nudum of the antennae is unusually long, of over 20 segments. The uncus resembles that of *Sophista*. The palpi are short as in *Nisoniades*.

The diagnosis of the genus is based on *remus* and *purpurascens*, as the type species was not available for examination.

1 (2a). ♂ upf no costal fold or other secondary sexual characters. Below palpi grey. ♂ F 28 mm.

heros. 2 sub-species.

(a). Differs from *heros* in unh plain dark brown with the tornal third pale blue. Above, markings fainter, obsolete uph. Unf no ochreous areas.

Sub-sp. **heroica** nov: ♂ Colombia, Rio Dagua: W. Rosenberg: type B.M.

B.M. 3 ♂ Colombia (R. Dagua). 2 ♂ Ecuador (Paramba).

(b). Above, brown with a strong violet gloss. Upf with an irregular, macular dark discal band, a large dark spot mid cell and a faint submarginal dark band. Uph base and termen dark with an irregular dark central band. Unf redder brown, the bands faint: dorsum nearly white: large ochreous areas below costa on either side of the discal band. Unh dorsum suffused grey: ochreous areas on either side of the discal band, an ochreous spot in the cell: a conspicuous tornal black spot. Nudum 11/11.

Sub-sp. **heros** Mabille & Boullet 1916: ♂ Peru.
B.M. 1 ♂ Colombia. 21 ♂ Peru (San Gaban. Carabaya. Chaquimayo). 3 ♂ Bolivia (R. Songo. La Paz. Salampioni). 11 ♂ Iquitos.

2a (1). ♂ upf with a costal fold.
2 (3a). Below, palpi and pectus bright yellow. Above, very dark brown with a purple gloss: upf with a central and irregular discal dark band and 3 apical hyaline spots: uph with a dark discal band. Unh pale reddish-brown, darker about costa: irregular dark discal band and a spot in cell. ♂ F 20 mm. Antennae, nudum 18/13.

purpurascens Mabille & Boullet 1912: ♂ Brazil. Fig by Hayward 1948 is of *Telemiades squanda.*
B.M. 3 ♂ Peru (Chanchamayo. Perene). 2 ♂ Upper Amazons (Pebas. Iquitos).

3a (2). Below, palpi and pectus dark brown. Above, dark shining brown, with dark bands, less well marked than in *purpurascens*, but no hyaline spots upf. ♂ F 20 mm.
3 (4). Below, dark brown; dorsal third unh dull grey: narrow white scaling at apex unf and before the brown cilia H. Antennal nudum 17/11. Uncus short bifid: aedoeagus very broad and heavily spined on either side.

remus Bell 1937: ♂ Putumayo River, Peru: genitalia figured.
B.M. 1 ♂ Peru (La Merced).

4 (3). Below, dark brown; above cell unh dark rufous brown, paler elsewhere, the dark band from above appearing as faint spots in and above cell, a thin terminal line of blueish-white scales. Above, bands more distinct and uph with a violet tinge. Clasp of a different type: cuiller narrow, bent at right angles over the valva.

romulus Bell 1937: ♂ Putumayo River, Peru: genitalia figured.
B.M. None.

E.17. SOPHISTA Plötz 1879: type *aristoteles* Westwood: fixed by author.

Antennae = ½ costa, bent beyond thickest part of club: nudum 7/7. Palpi porrect, third segment stout. Wings produced: H vein 1a > vein 8, termen excavate before vein 1b. ♂ no costal fold or tibial tuft. Uncus long, undivided. Recognised by the broad white central band across both wings and absence of hyaline spots.

1 (2). Above, dark brown basal and outer areas not cut by white veins. ♂ F 17 mm.

aristoteles. 2 sub-species.

(a). Above, submarginal narrow dark band is macular on H and in spaces 1b to 3 on F. Upf central white band not extending above vein 3.

Sub-sp. **aristoteles** Westwood 1852: ♂ Amazons: type B. M.: figured. Fig Staudinger 1888: Seitz.

B.M. 3 ♂ "Panama". 2 ♂ "Surinam". 1 ♂ "Ecuador". 19 ♂ S. Peru (San Gaban. Chaquimayo. Carabaya. Yahua). 4 ♂ Bolivia (Chimate. Muschay. La Paz). 49 ♂ 6 ♀ Upper Amazons (R. Negro. Upper Putumayo. Ega. Iquitos. S. Paulo de Olivenca). 2 ♂ Minas Geraes.

(b). Above, submarginal narrow dark band continuous, not macular. Upf central white band extends into cell upf (as specified by Plötz). Genitalia differ as shown in figure.

Sub-sp. **plinius** Plötz 1882: S. America. Fig in Seitz is of *aristoteles*.

B.M. 3 ♂ 2 ♀ S. Brazil (São Paulo. Novo Friborgo. Petropolis).

2 (1). Above, dark basal and outer areas divided by white veins: submarginal macular dark band extends to apex. ♂ F 17 mm.

latifasciata. 2 sub-species.

(a). Above, the central white band narrow, 2 mm: not reaching costa on upf, nor divided.

Sub-sp. **matto** nov: ♂ Cuyaba, Matto Grosso.
B.M. 1 ♂ type. 1 ♀ Chapada, Matto Grosso.
(b). Above, the band 4 mm wide: on upf reaching costa and divided at vein 3 so as to isolate a large black spot at end of cell.
Sub-sp. **latifasciata** Spitz 1930: ♂ São Paulo: figured.
B.M. 1 ♂ Minas Geraes. 3 ♂ 4 ♀ São Paulo.

E.18. POLYCTOR Evans (p. 9): type *polyctor* Prittwitz: fixed by author.

Closely allied to *Nisoniades*, differing primarily in the presence of at least one discal hyaline spot in addition to the apical spots and the light instead of brown palpi. The gnathos is not prostrate as in *Nisoniades*. The hindwings are quadrate, produced or angled at the end of vein 3. Antennal nudum 7/7 to 8/9.

1 (2a). Above with a broad central white band across both wings. ♂ unh vein 7 rises mid-way between base and end cell, swollen as far as end cell and on uph covered by hair tuft arising from base of costa, as in *Nisoniades bessus*.
polyctor. 3 sub-species.
(a). Differs from *polyctor* in having the white cell spot upf hyaline and in genitalia. ♂ F 18 mm.
Sub-sp. **cleta** nov: ♂ Acapulco, Guerrero, Mexico: Sept: H. H. Smith: type B.M. Genitalia fig by Godman & Salvin as *polyctor*.
B.M. 6 ♂ 1 ♀ Mexico. 4 ♂ Guatemala. 3 ♂ Costa Rica.
(b). Upf cell spot opaque. There are 2 forms, in one the dark areas above are dark brown: in the other light brown. They fly together in Bolivia and Brazil looking very different: elsewhere they intergrade or only intermediate forms occur. ♂ F 18 mm.
Sub-sp. **polyctor** Prittwitz 1868: ♂ Corcovado, Rio. Fig Staudinger 1888: Seitz: Godman & Salvin, ♂ (not genitalia, which are *cleta*): Hayward 1948, ♂ and genitalia. Synonym. *ithrana* Butler 1870: ♀ Rio: type B.M.
B.M. 1 ♂ Costa Rica. 1 ♂ Nicaragua. 6 ♂ 1 ♀ Panama. 9 ♂ Colombia. 4 ♂ Venezuela. 7 ♂ 6 ♀ Fr Guiana. 2 ♂ Ecuador (R. Napo). 13 ♂ 1 ♀ Peru (Rentema Falls.

Chanchamayo. Perene. Amazonas). 22 ♂ Bolivia (Buenavista. Santa Cruz. San José. Mapiri. Tanampaya. Cochabamba. Yungas, La Paz). 12 ♂ 4 ♀ Upper Amazons (Iquitos to Santarem). 1 ♂ Goyaz. 2 ♂ 1 ♀ Minas Geraes. 1 ♂ Pernambuco. 6 ♂ 5 ♀ Matto Grosso. 20 ♂ 3 ♀ S. Brazil. 25 ♂ 2 ♀ Paraguay. 4 ♂ Argentine.

(c). Larger, ♂ F 20 mm., and much darker. Above dark areas solid, not variegated. Upf hyaline spot in space 2 usually absent. Genitalia as *polyctor*.

Sub-sp. **dagua** nov: ♂ Colombia, R. Dagua: type B.M.
B.M. 4 ♂ type loc.

2a (1). Above, no white band. ♂ unh vein 7 placed as in *polyctor* but not swollen and no tuft uph.

2b (4a). H produced mid termen, but not angled.

2 (3). Unh without grey or white scaling. Upf spot in space 2 large, larger than apical spots. Above, variegated dark brown and ochreous brown: paler below: ♀ paler above and below. Upf hyaline spots in spaces 2, 3, apical in space 6–8, and a small spot at base of space 2. ♀ with additional spots, in space 1b and 2 in cell. ♂ F 16 mm.

enops Godman & Salvin 1894: ♂ Atoyac, Vera Cruz, Mexico: figured : type B.M.
B.M. 2 ♂ Mexico. 1 ♀ Honduras. 1 ♀ Nicaragua. 1 ♂ Ecuador (Zamora).

3 (2). Unh with grey or white scaling. ♂ F 19 mm. Above, with an obscure violet wash.

fera. 2 sub-species.

(a). ♂ darker than *fera*, discal spots smaller and unh grey scaling reduced. ♀ uph much paler ochreous: unh tornal two-thirds white with small dark discal spots.

Sub-sp. **falla** nov: ♀ Venezuela: Dyson 1947: type B.M.
B.M. 1 ♂ 1 ♀ Colombia. 1 ♀ Venezuela.

(b). Larger and darker than *enops* and the hyaline spots reduced, pale areas reddish-brown. Upf discal spots in spaces 2 and 3 no larger than the apical spots. Below, paler, with grey scaling before the termen: unf intensified at apex and tornus: unh extending over the tornal quarter. ♀ as ♂: upf discal spots larger and with a spot at base of space 2.

Sub-sp. **fera** Weeks 1901: ♂ Bolivia. Fig Weeks 1905.
Synonym. *diversa* Williams & Bell 1939: ♂ Bolivia: genitalia figured.
B.M. 1 ♂ Ecuador (Zamora). 5 ♂ 1 ♀ Peru (Moyabamba).

4a (2b). H sharply angled or produced at vein 3.
4 (5). ♀ H toothed at end of vein 3. Above, light brown with narrow dark bands. Upf with 2 small discal spots in space 1b, large ⊃-shaped spots in spaces 2 and 3, dot in space 4, apical in spaces 6–8, dot at base of space 2 and another above it in lower half of cell. Unh pale blue with narrow irregular brown markings and brown before the termen. ♀ F 16 mm.

extensa Mabille 1891: ♀ Huancabamba: unpublished fig in B.M.
Figs by Hayward 1948 are of *tensa*.
B.M. 1 ♀ "St Anna" (Crowley coll).

5 (4). ♂ H angled at end vein 3. Above, light brown with irregular narrow dark bands, central, discal and submarginal. Upf with small hyaline markings on the dark bands: narrow streak across space 2 (may be divided into 2 dots), across space 3, in cell (may be absent or there may be 2 spots), apical in spaces 6–8 in line and usually a more inwardly placed dot in space 9. Below, as above: unh tornal half grey. Palpi below grey-brown. F truncate at tornus. ♂ F 15 mm.

tensa nov: ♂ Brazil: type B.M. Fig Hayward 1948, ♂ and genitalia as *extensa*.
B.M. 1 ♂ Matto Grosso. 1 ♂ Brazil. 1 ♂ Paraguay.

E.19. NISONIADES Hübner 1819: type *mimas* Cramer: fixed by Scudder 1875 as *bromius* Stoll, which is a synonym of *mimas*.

Antennae = ½ costa: shaft plain: club bent beyond its thickest part to a slender, pointed apiculus: nudum 8/8. Palpi short, porrect, brown below. ♂ F wings somewhat produced: H dorsum > costa. ♂ unh vein 7 modified, shifted towards base at its origin, bared of scales, more or less swollen or glandular: uph the origin of vein 7 covered by a hair tuft springing from base of costa. Dark species with darker bands or spots: upf with small hyaline spots at the apex, but none elsewhere. ♂ no costal fold or tibial tuft. Uncus tapered, undivided: gnathos generally prostrate along either side of the vinculum: aedoeagus short, bent inwards towards the uncus and swollen at the point of flexure: clasps broad, always asymmetrical, joined to the vinculum right up to the uncus: valva generally as long as, and broader than, the cuiller, without a style.

1a (9a). ♂ unh vein 7 from its origin divergent from the radius.

1b (4a). ♂ unh vein 7 rises from mid base and end cell, swollen as far as over end cell.

1c (3). ♂ cuiller of right clasp undivided.

1 (2). ♂ cuiller of left clasp not longer than the valva: gnathos well developed, serrate: uph tuft short and inconspicuous. Upf the central dark band isolated from the basal and discal dark bands. ♂ F 17 mm.

bessus. 9 sub-species.

(a). ♂ cuiller of both clasps as long as the valva, which is flat topped: dorsal spine of gnathus bulbous at tip. Above dark spotted.

Sub-sp. **godma** nov: ♂ Nicaragua, Chontala: T. Belt: type B.M.: genitalia figured by Godman & Salvin as *macareus*. B.M. 10 ♂ 4 ♀ Mexico. 3 ♂ Guatemala. 1 ♂ Honduras. 3 ♂ 2 ♀ Nicaragua. 2 ♂ Costa Rica.

(b). ♂ cuiller of left clasp curved, narrow, shorter than valva, the top of which is rounded: dorsal spine of gnathos sharply pointed. Otherwise as *godma*.

Sub-sp. **panama** nov: ♂ Chiriqui: Champion: type B.M. B.M. 5 ♂ 5 ♀ Panama. 6 ♂ Colombia (Popoyan. Cauca). 1 ♂ Ecuador (Loja).

(c). Wings broader, much darker, markings only visible towards apex and termen: apical spots upf conspicuous, in a straight line. Genitalia as *panama*, but valvae have angular tops.

Sub-sp. **benda** nov: ♂ Ecuador, Chimbo 1,000 ft.: Aug 1897: Rosenberg: type B.M.

B.M. 18 ♂ 1 ♀ Ecuador (Chimbo. Paramba. Balzapamba).

(d). Above as *benda*. ♂ left clasp has the cuiller short, very broad, triangular: valva very broad, extending well above the cuiller.

Sub-sp. **hecale** Hayward 1940: ♂ Ecuador, Rio Margarita: genitalia figured.

B.M. 9 ♂ Ecuador (Rio Pastaza. Ambato).

(e). As *hecale*, but unh the tornal half of the wing is brownish-white, traversed by dark bands.

Sub-sp. **cauca** nov: ♂ Colombia, Cauca, distrito de Pereira, Roman M. Valencia, 1886: type B.M.

B.M. 2 ♂ type loc.

(f). As *hecale*: left clasp intermediate between *benda* and *hecale*. Unh outer half pale ochreous brown, unmarked.

Sub-sp. **remo** nov: ♂ San Remon, Peru, 3,000 ft.: type B.M.

B.M. Only the type.

(g). Spotted as in *godma* and *panama*. Left clasp varying in form between *panama* and *hecale*. Dorsal spines of the gnathos are asymmetric: on the left side the spine is expanded to a large disc: on the right it is a shorter spine than usual. Unh variable, particularly in ♀, which may be brownish-white: palest in Trinidad.

Sub-sp. **bessus** Möschler: 1876: ♀ Surinam: figured.

Fig Sepp 1850, ♀ as *mimas*: Godman & Salvin, ♂ (not genitalia, which are *godma*), as *macareus*: Seitz, ♀ as *bessus*, ♂ as *macareus* and *bromias*.

Synonyms. *trigeminus* (Herrich-Schäffer MS) Plötz 1882. *sordidulus* Mabille 1904: *bessus*: no description. *montana* Williams & Bell 1939: Venezuela: genitalia figured.

B.M. 4 ♀ Venezuela. 16 ♂ 9 ♀ Trinidad. 1 ♂ Jamaica. 6 ♂ 6 ♀ Br Guiana. 3 ♂ Surinam. 1 ♂ 7 ♀ Fr Guiana. 24 ♂ 5 ♀ Upper Amazons (Iquitos, S. Paulo de Olivenca). 17 ♂ 7 Lower Amazons (Pará. Santarem). 1 ♂ Ecuador (Loja). 4 ♂ Peru (Tarapote. R. Maranon. Loreto. Perene).

(h). A rather smaller spotted form with the wings more rounded. Clasps nearly symmetrical, cuiller nearly as long as the rounded valva. Dorsal spines of gnathos short, symmetrical, barely serrate.

Sub-sp. **criton** Mabille 1897: ♂ Bolivia, Tanampaya.

Synonym. *hesperia* Hayward 1939: ♂ Paraguay: genitalia figured. Fig Hayward 1948, ♂ and genitalia.

B.M. 3 ♂ Bolivia (Santa Cruz. Buenavista). 1 ♂ N. Argentine (Iquia).

(i). Spotted form, inseparable above from *bessus*. Unh the tornal half usually much paler. Very variable as to size, facies and genitalia, which generally resemble *bessus*, but the dorsal spines of the gnathos are small and symmetrical.

Sub-sp. **maura** Mabille & Boullet 1916: ♀ Brazil.

Synonym. *gambrus* Mabille & Boullet 1917: Brazil.

B.M. 3 ♀ Bahia. 1 ♂ 1 ♀ Pernambuco. 5 ♂ Minas Geraes. 15 ♂ 2 ♀ S. Brazil (Rio. Paraná. Espirito Santo). 3 ♂ Paraguay.

2 (1). ♂ cuiller of left clasp longer than valva: gnathos vestigial, just traceable at the dorsal end. Above like *bessus maura*, submarginal dark band more macular. Unh tornal half brownish-white. ♂ F 17 mm.

brazia nov: ♂ Novo Friborgo: P. Germain: Feb 1884: type B.M.

B.M. 10 ♂ 2 ♀ S. Brazil (Rio. São Paulo. Paraná. Novo Friborgo).

3 (1c). ♂ cuiller of right clasp broadly bifid. Above, very dark, bands faint: wing shape of *bessus*. Uph submarginal band of paler brown spots clearly defined. Unh uniform, markings small, tornal spot conspicuous. ♂ F 16 mm.

laurentina Williams & Bell 1939: ♂ Fr Guiana: genitalia figured.

B.M. 1 ♂ Mexico. 1 ♂ Costa Rica. 1 ♀ Trinidad. 1 ♂ Br Guiana. 8 ♂ 6 ♀ Fr Guiana.

4a (1b). ♂ unh vein 7 rises nearer end cell than base: the swollen portion slender and extending well beyond end of cell.

4b (8). ♂ unh veins 7 and 6 evenly divergent.

4 (5a). Upf central dark band isolated. Dark species with conspicuous hyaline spots in a straight line. Gnathos absent: clasps nearly symmetrical, cuiller narrow, longer than valva. Uph tuft inconspicuous. ♂ F 17 mm.

heliodore Hayward 1939: ♂ Ecuador, Rio Verde: genitalia figured.

Synonym. *hora* Hayward 1939: ♂ Ecuador, Rio Upana: genitalia figured.
B.M. 1 ♂ Ecuador. 1 ♂ Peru (Yahua). 1 ♀ Amazons (Pebas).

5a (4). Upf central dark band not isolated. Uph tuft long, conspicuous. Gnathos slender, not serrate.
5 (6a). Upf central and discal bands conjoined Y-wise. Dark bands conspicuous: unh tornal area not paler. ♂ F 17 mm.

rubescens Möschler 1876: ♀ Surinam: figured.
Synonyms. *bromias* Godman & Salvin 1894: ♂ Mexico: type B.M.: figured ♂, ♀ and genitalia. Fig Hayward 1948, ♂ and genitalia: fig in Seitz is of *bessus*.
triangulus Mabille 1897: Bolivia.
clara Mabille & Boullet 1916: ♂ French Guiana.
nigra Mabille & Boullet 1916: ♂ Brazil.
B.M. 31 ♂ 7 ♀ Mexico. 1 ♂ Honduras. 9 ♂ 2 ♀ Guatemala. 2 ♀ Nicaragua. 3 ♂ Costa Rica. 6 ♂ 1 ♀ Panama. 2 ♂ Colombia. 19 ♂ 5 ♀ Trinidad. 8 ♂ 2 ♀ Br Guiana. 3 ♂ Surinam. 2 ♀ Fr Guiana. 2 ♂ Bolivia. 2 ♂ 5 ♀ Lower Amazons (Pará. Santarem). 1 ♂ Pernambuco.

6a (5). Upf central band conjoined to the dark basal area.
6 (7). Upf with 3 irregular apical dots. ♀ with a strong violet flush, apparent below in ♀. ♀ unh bands broad and tornal area paler brown. Variable in size and genitalia. ♂ F 17 mm.

mimas Cramer 1775: ♀ Surinam: figured.
Synonyms. *bromius* Stoll 1790: ♀ Surinam: figured. Fig in Seitz is *Morvina fissimacula*.
orsus Mabille 1889: ♂ Venezuela: figured.
inca Lindsey 1925: ♂ Peru: figured ♂ and genitalia.
potera Williams & Bell 1939: ♂ E. Colombia: genitalia figured.
pollardi Williams & Bell 1940: ♂ Br Guiana: genitalia figured.
B.M. 3 ♂ Colombia. 5 ♂ 2 ♀ Venezuela. 3 ♂ 6 ♀ Br Guiana. 1 ♂ 1 ♀ Surinam. 1 ♀ Fr Guiana. 2 ♂ Ecuador (Canelos. Archidona). 2 ♂ Peru (La Merced. Chaquimayo). 4 ♂ 1 ♀ Upper Amazons (Iquitos. S. Paulo de

Olivenca). 2 ♂ 5 ♀ Lower Amazons (Pará). 1 ♂ Matto Grosso.

7 (6). Upf generally with 2 apical spots: if a third is present it is in line with the other 2. Unh more or less uniform. No violet flush. ♂ F 17 mm.

bipuncta Schaus 1902: ♂ Petropolis. Fig Seitz as *bipunctata*: Williams & Bell 1939, ♂ genitalia: Hayward 1948, ♂ and genitalia.
Synonyms. *binotata* Hayward 1934: ♂ Argentine: genitalia figured. Fig Hayward 1948, ♂.
nebula Bell 1937: ♂ Santa Catharina: genitalia figured.
B.M. 2 ♂ "Colombia". 6 ♂ 1 ♀ Bahia. 4 ♂ Minas Geraes. 26 ♂ 2 ♀ S. Brazil (Novo Friborgo. Rio. Espirito Santo. São Paulo. Petropolis).

8 (4b). ♂ unh veins 7 and 6 run parallel to the end of the swollen portion of vein 7 and then diverge. Above, dark and very uniform: upf apical spots minute, irregular, central spot often absent: central dark band isolated: uph bands parallel and separate, inner band not connected to the discal band by a dark bar about end of cell, as in *bessus*. ♂ uph tuft paler, very long and conspicuous. Genitalia variable: anellus more or less spined dorsally. ♂ F 17 mm.

ephora Herrich-Schäffer 1870: ♂ Nicaragua (determined by Godman 1907). Fig Seitz.
Synonyms. *perforata* (Prittwitz MS) Plötz 1882.
tiphys Godman & Salvin 1894: ♂ Mexico: type B.M.: figured, ♂, ♀ and genitalia.
peruana Williams & Bell 1939: ♂ Putumayo: genitalia figured.
B.M. 40 ♂ 7 ♀ Mexico. 16 ♂ 1 ♀ Guatemala. 1 ♂ Salvador. 16 ♂ 1 ♀ Costa Rica. 3 ♂ Panama. 27 ♂ Colombia. 9 ♂ Venezuela. 8 ♂ Trinidad. 1 ♂ 1 ♀ Br Guiana. 4 ♂ 1 ♀ Ecuador (Paramba. Chimbo. Quito). 2 ♂ Peru (La Merced). 1 ♀ Pernambuco.

9a (1a). ♂ unh vein 7 from its origin runs along, or is coalesced with, the radius and vein 6 up to the end of the swollen portion.

9b (12a). H triangular, as in preceding species, not angled or produced at end of vein 3.

9 (10a). ♂ unh vein 7 and the radius united by a glandular area. Above, dark with faint markings: upf apical spots in line, conspicuous, central band isolated. Unh uniform. Right clasp bifid: ♂ F 18 mm.

rimana Bell 1942: ♂ Venezuela: genitalia figured.

B.M. 2 ♂ Br Guiana. 2 ♂ Ecuador (Canelos). 2 ♂ Peru (R. Maranon. Chaquimayo). 3 ♂ Upper Amazons (Putumayo. Iquitos). 1 ♂ Brazil.

10a (9). ♂ unh the glandular area confined to vein 7, which runs touching the radius.

10 (11). Above and below, exactly like *rimana*. Gnathos not serrate. ♂ F 18 mm.

indistincta Williams & Bell 1939: ♂ E. Colombia. Genitalia figured (seem damaged).

B.M. 1 ♂ Colombia.

11 (10). Above, variegated, due to the outer areas being pale brown: upf central dark band united with the basal and discal bands to form a large dark area, extending to the dorsum, apical spots irregular, well marked: unh outer area paler brown, tornal dark spot conspicuous. ♂ uph the hair tuft dark, short, inconspicuous. ♂ F 15 mm.

brunneata Williams & Bell 1939: ♂ French Guiana: genitalia figured.

Synonym. *borra* Bell 1947: ♂ Colombia: genitalia figured.

B.M. 3 ♀ Br Guiana. 1 ♀ Surinam. 1 ♂ 1 ♀ Peru (Amazonas). 1 ♂ Upper Amazons (R. Ucayali).

12a (9b). H quadrate, more or less angled at end of vein 3. Small, ♂ F 15 mm or less.

12b (14a). ♂ unh glandular area covers vein 7 and the radius.

12 (13). Gnathos present and highly serrate. Above, grading from a very dark form to a pale one. The dark form has the central band more or less isolated: uph and unh uniform dark brown. The pale form has the central and discal bands **Y**-wise: uph pale yellowish-brown and the spots of the central band are pale centred: unh tornal half pale yellow.

macarius Herrich-Schäffer 1870: ♂ Venezuela.

Figs by Godman & Salvin and Seitz, as *macareus*, are of *bessus*.

Synonyms. *albangula* Herrich-Schäffer 1870: ♂ Guatemala. Fig Seitz.

gonoptila Burmeister 1879: ♀ Buenos Ayres. Fig of genitalia by Williams & Bell 1939 and Hayward 1939: ♂ and genitalia by Hayward 1948.

angulosus Mabille 1895: ♂ Santa Catharina.

ruda Mabille & Boullet 1916: ♂ Pará: type B.M.

rhamses Mabille & Boullet 1916: ♂ Pará: type B.M.

guianae Williams & Bell 1939: ♂ Fr Guiana: genitalia figured.

B.M. 1 ♀ Honduras. 1 ♀ Panama. 3 ♂ 2 ♀ Colombia. 3 ♂ 2 ♀ Br Guiana. 1 ♀ Tobago. 1 ♀ Fr Guiana. 1 ♂ Ecuador (Zamora). 4 ♂ Peru (San Gaban. Ucayali. Perene. Moyabamba). 8 ♂ Bolivia (Chulumani. La Paz. Santa Cruz). 3 ♂ Rio Madeira. 16 ♂ 6 ♀ Pará. 7 ♂ 3 ♀ Bahia. 12 ♂ 2 ♀ Ceara. 1 ♂ 1 ♀ Pernambuco. 2 ♂ 1 ♀ Minas Geraes. 6 ♂ Matto Grosso. 8 ♂ 4 ♀ S. Brazil (Rio. São Paulo). 1 ♀ Uruguay. 3 ♂ Argentine.

13 (12). Gnathos absent: right clasp bifid. Above, much more spotted than *macarius* and with more or less of a violet flush: upf central band isolated: above and below uniform.

nyctineme Butler 1870: ♀ Lower Amazons: type B.M. Butler described a ♂ and a ♀: his ♂ is the ♀ type: his ♀ is a ♀ of *Gorgythion beggina*. Genitalia fig by Godman & Salvin is of *castolus*: by Williams & Bell 1939 is correct. B.M. 1 ♀ Venezuela. 1 ♂ Br Guiana. 2 ♂ 1 ♀ Fr Guiana. 2 ♀ Amazons. 1 ♀ Peru (Chambireyacu).

14a (12b). ♂ unh glandular area confined to vein 7.

14 (15). Gnathos not serrate. Above, dark brown with dark bands: unh varying from uniform brown to having the tornal half white, with white-centred dark spots.

castolus Hewitson 1878: ♂ Brazil: type B.M. Fig Seitz (upperside fig too large): genitalia by Godman & Salvin as *nyctineme*: genitalia by Hayward 1938 are *hawyardi*.

Synonyms. *alternata* Williams & Bell 1939: ♂ Peru: genitalia figured.

hesione Hayward 1939: ♂ Ecuador: genitalia figured.
B.M. 2 ♂ Nicaragua. 2 ♂ 1 ♀ Panama. 1 ♂ Colombia. 8 ♂ Ecuador (Chimbo. Paramba). 1 ♂ Peru (R. Maranon). 1 ♂ Bolivia (Santa Cruz). 10 ♂ Upper Amazons (Iquitos. S. Paulo de Olivenca). 1 ♂ Pará. 2 ♀ Pernambuco. 2 ♂ Minas Geraes. 2 ♂ Matto Grosso. 13 ♂ 2 ♀ S. Brazil. (Espirito Santo. Rio. São Paulo). 1 ♀ Chili (Valparaiso).

15 (14). Gnathos serrate: right clasp bifid. Above matt brown, bands faint: upf hyaline spots conspicuous, in a straight line, dark central band isolated: unh paler matt brown, markings faint.

haywardi Williams & Bell 1939: ♂ Argentine: genitalia figured. Fig of genitalia by Hayward 1938, as *castolus*: Hayward 1948, ♂ and genitalia, correctly.
B.M. 1 ♂ 3 ♀ Argentine (La Rioja).

E.20. PACHYNEURIA Mabille 1888: type *obscura* Mabille: sole species included by author.

As considered here, the genus contains 3 groups of species, which differ from *Nisoniades* in having no hyaline spots, nor a prostrate gnathos, and from *Pellicia* in having no purple or violet colouring as well as a longer nudum to the antennal club. The first two species have distinct facies, but the third species, which has similar genitalia to the first two, is very like the remaining species, dark brown with black spots arranged as in *Nisoniades*. Wing shape, palpi and antennae as in *Nisoniades*: nudum 7/10 to 8/8.

1a (7a). ♂ uph no hair tuft. Palpi below, grey.

1b (4a). Uncus with a complex dorsal process: aedoeagus long, straight and slender.

1 (2, 3). Above, dull pale brown with dark veins: unmarked except for a small black spot at upper end of cell upf and a faint narrow dark submarginal band. Below, similar: faint dark discal band unh. ♂ unh vein 7 rises mid base and end cell. ♂ F 19 mm.

obscura Mabille 1888: ♂ Chanchamayo: figured. Fig Seitz.
B.M. 7 ♂ Peru (Huancamba. Pozuzo. Cuzco. Carabaya. Chaquimayo). 1 ♂ Bolivia.

2 (1, 3). Above, similar to *obscura*, but much darker, with narrow dark central, discal and submarginal bands, between which are pale brown bands divided into spots by dark veins. Below, similar, but without the dark veins: unf the markings faint: unh conspicuous, as in *Nisoniades bessus*, no tornal dark spot. ♂ unh vein 7 rising nearer end cell than base. ♂ F 19 mm.

jaguar nov: ♂ Peru, Pozuzo, Huanco: 3,000 ft.: W. Hoffmann: type B.M.

B.M. 2 ♂ Peru (type loc). 1 ♂ with Mabille's labels, "Peruvia", "*Tel inops* Mab", "Gen *Eracon* nov, type *biternata* Mab".

3 (1, 2). Above, dark brown with separated basal, central, postdiscal and submarginal macular dark bands, arranged as in the ♀ of *Nisoniades bessus*: veins not darkened. ♂ vein 7 rising from nearer end cell than base.

lineato-punctata. 2 sub-species.

(a). ♂ F 17 mm, wings more pointed. ♂ unh darker, markings fainter, large dark tornal spot. ♀ unh much lighter, especially towards tornus, dark spot present or absent.

Sub-sp. **belema** nov: ♂ Pará, Belem: A. M. Moss: type B.M.

B.M. 2 ♂ 3 ♀ Pará. 1 ♂ 1 ♀ Manaos, Lower Amazons.

(b). ♂ F 18 mm. Unh variable: ochreous brown with conspicuous markings, tornal lobe generally absent, some bluish scaling about tornus. Genitalia differ, as indicated in the figure.

Sub-sp. **lineato-punctata** Mabille & Boullet 1916: ♂ Peru: type B.M.

Synonyms. *phintias* Bell 1937: ♂ Iquitos: genitalia figured.

? *achates* Bell 1937: ♂ Mapiri: clasps of genitalia figured. May be a sub-species.

B.M. 11 ♂ Peru (San Gaban. Chaquimayo. Carabaya. Huancabamba. Cuzco. Yahuarmayo). 6 ♂ Upper Amazons (Iquitos. Manicoré).

4a (1b). Uncus without any dorsal process: aedoeagus short, bent inwards and expanded at bend. Above, markings as in *lineato-punctata*. ♂ unh vein 7 rises from mid base and end cell.

4 (5a). Unh without any bluish-white scaling.

duidae. 2 sub-species.

(a). ♂ F 16 mm: wings narrow, produced. Above, paler, macular dark markings very conspicuous. ♂ unh with a tornal dark spot. ♀ unh tornal half yellow with dark spots, tornal dark spot present or absent.

Sub-sp. **duidae** Bell 1932: ♂ Venezuela: fig genitalia.

B.M. 1 ♀ Br Guiana. 1 ♀ Surinam. 1 ♂ Fr Guiana. 4 ♂ Upper Amazons (Iquitos. Pebas). 10 ♂ 4 ♀ Pará. 1 ♀ Bahia.

(b). ♂ F 18 mm: wings much broader. Above, darker, dark markings less conspicuous. Unh duller, more uniform: no tornal dark spot or faint.

Sub-sp. **pozuza** nov: ♂ Peru, Pozuzo, Huanco: 3,000 ft.: W. Hoffman: type B.M.

B.M. 4 ♂ Peru (Pozuzo. Limbani. R. Inambari). 2 ♂ Bolivia (Cochabamba).

5a (4). Unh with tornal bluish-white scaling: no tornal dark spot.

5 (6). ♂ F 16 mm: wings produced. Unh no ochreous colouring and the white may extend over half the wing.

inops Mabille 1877: ♂ Brazil: type B.M.

Synonyms. *eremita* Plötz 1884: ♀ S. America: type B.M. ex coll Kaden marked "*Talides eremita*" on an old green label, agreeing exactly with Plötz's unpublished fig (copy in B.M.) Fig Seitz.

zita Bell 1947: ♂ Itatitaya Mts. Rio: genitalia figured.

B.M. 1 ♂ Bahia. 6 ♂ 1 ♀ S. Brazil (Rio. São Paulo. Paraná. Novo Friborgo).

6 (5). ♂ F 20 mm: wings broad. Unh discal areas ochreous: tornal white scaling not extending upwards beyond vein 1b.

damon Bell 1937: ♂ Manicoré, Brazil: genitalia figured.

B.M. 1 ♂ Ecuador. 1 ♂ Peru (San Gaban). 1 ♂ Bolivia.

7a (1a). ♂ uph with a hair tuft as in *Nisoniades*. Palpi brown.

7 (8). ♂ unh vein 7 rises nearer to end of cell than to the base: basal portion of the vein slightly swollen and divergent from radius: uph hair tuft long. Uncus asymmetric,

flanked by asymmetric processes: aedoeagus slender, curved, as in *obscura*. ♀ unh the pale postdiscal band is turned towards the tornus in space 1c. ♂ F 18 mm.

licisca. 3 sub-species.

(a). Process on left of uncus long, slender, serrate. Above, marked as in *Nisoniades rubescens*.

Sub-sp. **licisca** Plötz 1882: ♂ Nicaragua. Fig Seitz.

Synonyms. *thyestes* Godman & Salvin 1894: ♂ Mexico: type B.M.: figured ♂ and genitalia.

melcheri Weeks 1906: ♂ Venezuela. Fig Weeks 1911.

B.M. 3 ♂ 2 ♀ Mexico. 3 ♂ Guatemala. 4 ♂ Honduras. 3 ♂ Costa Rica. 4 ♂ 1 ♀ Panama. 5 ♂ Colombia. 2 ♂ Venezuela.

(b). Process on left of uncus short and broad ending in 2 short points. Otherwise as *licisca*.

Sub-sp. **lista** nov: ♂ Fr Guiana: type B.M.

B.M. Only the type.

(c). Process on left of uncus as in *lista* but one of the two points is produced as a long spine. Darker. Unh with a tornal black spot.

Sub-sp. **herophile** Hayward 1939: ♂ Ecuador, Rio Upas: genitalia figured.

B.M. 1 ♂ Ecuador. 2 ♂ Upper Amazons (Pebas). 7 ♂ 5 ♀ Pará. 1 ♂ Minas Geraes. 1 ♂ Paraguay.

8 (7). ♂ unh vein 7 rises mid base and end cell, not swollen: tuft uph short. Uncus normal: aedoeagus as in *duidae*. ♂ F 17 mm. Above, very dark: discal dark band upf very wide and continuous. Unh chocolate brown, with small, faint yellowish discal and subdiscal spots.

helena Hayward 1939: ♂ Ecuador, Rio Topo: genitalia figured.

Synonym. *kuma* Bell 1942: ♂ Venezuela: genitalia figured.

B.M. 1 ♂ Br Guiana. 1 ♂ Maranham.

E.21. PELLICIA Herrich-Schäffer 1870: type *dimidiata* Herrich-Schäffer: fixed by Scudder 1875.

Synonym. *Hemipteris* Mabille 1889: type *tyana* Plötz: sole species included was *fumida* Mabille, which is a sub-species of *tyana*.

Differs from *Nisoniades* in having no hyaline spots upf: smooth palpi, which are tapered and convergent as in *Mycteris*. Antennae as in *Nisoniades*, nudum 8/8, but in the type species the nudum is 5/8. Wings produced: H triangular and the tornal angle often acute (in *tyana* and *theon*). Upf usually with a slaty-purple glaze along the costa. ♂ generally with vein 7 more or less modified and with a hair tuft overlying its origin uph, as in *Nisoniades*. Genitalia of the *Nisoniades* type, but generally the gnathos is absent: in *dimidiata* it is erect. Below, palpi and pectus usually grey.

1a (10a). Uph with a hair tuft over origin vein 7.

1b (9). ♂ unh no glandular patch covering vein 7 at its origin and the radius: vein 7 has its basal sixth (not as far as end cell) bared and slightly swollen: aedoeagus as in *Nisoniades*.

1c (7a). ♂ cuiller and valva of clasp sub-equal.

1d (3a). ♂ valva of clasp without a conspicuous projecting spine.

1 (2). ♂ end of valva broadly rounded, edge finely serrate. Anellus dorsally with a broad, smooth, angled plate. Gnathos rather more developed than usual. Superficially like *costimacula*. ♂ F 18 mm.

klugi Williams & Bell 1939: ♂ Peru, R. Putumayo: genitalia figured.

B.M. 3 ♂ Upper Amazons (R. Negro. Iquitos).

2 (1). ♂ end of valva angled and spined. Uncus broader than usual: anellus with a pair of oval serrate lobes as in *vecina*. Like *costimacula*. ♂ F 18 mm.

santana Williams & Bell 1939: ♂ Peru: genitalia figured.

Synonym. ? *simulator* Williams & Bell 1939: ♂ Peru: genitalia figured.

B.M. 1 ♂ Upper Amazons (Fonte Boa).

3a (1d). ♂ valva with a conspicuous projecting spine.

3 (4a). ♂ without anellus lobes, but the dorsal side is more or less serrate. ♂ F 17 mm.

costimacula. 3 sub-species.

(a). Upf with the dark markings extending to dorsum and apparent uph. Unh tornally greyish-brown. Inner edge of right cuiller irregular and furnished with many short spines.

Sub-sp. **arina** nov: ♂ Mexico, Atoyac, Vera Cruz: figured Godman & Salvin plate 83, figs 16 and 17, ♂ as *costimacula*, nec fig 18 of genitalia, which is *angra*.
B.M. 6 ♂ 1 ♀ Mexico. 3 ♂ Guatemala. 1 ♂ Nicaragua. 1 ♂ 1 ♀ Costa Rica. 2 ♂ Panama.

(b). Darker: upf dorsal half, and all uph, markings absent or vestigial. Unh tornally paler brown. Inner edge of right cuiller ending in two (rarely 1 or 3) long spines, otherwise smooth.

Sub-sp. **costimacula** Herrich-Schäffer 1870: ♂ Venezuela. Fig Seitz: Godman & Salvin plate 83, figs 16, 17 (*arina*), and fig 18 (*angra*): Hayward 1948, ♀ and genitalia.
Synonyms. *subviolaceus* Mabille 1883: ♀ Brazil: type B.M. *guilfordi* Weeks 1901: ♂ Bolivia. Fig Weeks 1905.
B.M. 1 ♂ 1 ♀ Panama. 1 ♂ 1 ♀ Colombia. 1 ♀ Venezuela. 2 ♂ Br Guiana. 1 ♀ Fr Guiana. 2 ♂ Ecuador (Zamora). 4 ♂. Peru (Chanchamayo. R. Maranon. Pozuzo). 4 ♂ Bolivia (Reyes, Santa Cruz. San José.) 5 ♂ 1 ♀ Upper Amazons (Iquitos. Ega). 1 ♂ Pará. 1 ♂ Goyaz. 3 ♂ 1 ♀ Minas Geraes. 5 ♂ 5 ♀ S. Brazil (São Paulo. Paraná). 13 ♂ 1 ♀ Paraguay.

(c). Inner edge of right cuiller ends in a long spine followed by several decreasing spines.

Sub-sp. **hebe** Hayward 1939: ♂ Argentine: genitalia figured. Fig Hayward 1948, ♂ and genitalia.
B.M. 3 ♂ S. Brazil (Rio).

4a (3). ♂ with paired anellus lobes.
4 (5a). The anellus lobes are smooth, triangular. ♂ F 16 mm.

tyana. 2 sub-species.

(a). Above very dark, like *costimacula*. Unh uniform purple-brown with darker markings and a dark blue gloss. Below, palpi grey and brown, pectus mostly brown.

Sub-sp. **toza** nov: ♂ Colombia, Magdalena Valley: type B.M.
B.M. 5 ♂ Colombia (Manizales. Magdalena Valley. Lake Sapatoza).

(b). Unh tornal quarter violet-grey.

Sub-sp. **tyana** Plötz 1882. ♂ S. America: copy of unpublished plate in B.M. Fig Seitz.
Synonyms. *fumida* Mabille 1889: ♂ Itaituba.
violacea Mabille 1891: ? loc.
aequatoria Williams & Bell 1939: ♂ Ecuador: fig of genitalia.
B.M. 1 ♂ Brazil.

5a (4). The anellus lobes are serrate, oval.
5 (6). Uncus tapered, as usual. Spine on right valva bent down: on left valva present or absent. Unf apex conspicuously pale. ♂ F 15 mm.
vecina. 2 sub-species.
(a). Unh tornal area paler, but not white.
Sub-sp. **najaoides** Hayward 1933: ♂ Argentine: figured ♂ and genitalia. Fig Hayward 1948, ♂ and genitalia.
B.M. 5 ♂ Bolivia (Santa Cruz. San José. Santiago de Chiquitos). 1 ♂ Matto Grosso. 1 ♂ "Brazil". 1 ♂ Argentine (Santa Fé). 6 ♂ Paraguay.
(b). Unh tornal area white.
Sub-sp. **vecina** Schaus 1902: ♂ Petropolis. Fig Seitz: genitalia by Williams & Bell 1939: Hayward 1948, ♂ and genitalia.
B.M. 1 ♂ Paraná (Castro). 2 ♂ No loc.

6 (5). ♂ uncus strongly shouldered centrally, seen ventrally, unlike any species in the genus. Spine on right valva unusually long. Facies of *costimacula*. ♂ F 17 mm.
angra. 2 sub-species.
(a). Unh tornal half more or less paler brown.
Sub-sp. **angra** nov: ♂ Mexico, Atoyac, Vera Cruz: type B.M.: genitalia figured by Godman & Salvin, plate 83, fig 18, as *costimacula*.
B.M. 2 ♂ Mexico. 1 ♂ Guatemala. 1 ♂ Costa Rica. 1 ♂ 1 ♀ Panama.
(b). Unh tornal third bluish-white, marked by a broad discal band and obscure large submarginal spots in spaces 1c–3.
Sub-sp. **axina** nov: ♂ Paramba, Ecuador, 3,500 ft., May 1897, Rosenberg: type B.M.
B.M. 3 ♂ type loc.

7a (1c). ♂ cuiller of clasp shorter than the valva.
7 (8). ♂ valva with a projecting spine from below the tip. ♂ F 15 mm.

theon. 3 sub-species.
(a). Anellus lobes much modified, upper spine as long as the aedoeagus. ♂ above, dark with purple glazing upf and unmarked uph: unh with some white colouring at tornus and a conspicuous dark tornal spot. ♀ unh with wide white tornal area.

Sub-sp. **tonga** nov: ♂ Colombia, Lake Sapatoza Region, Chiriguana district. Aug–Sept 1924: C. Allen: type B.M.
B.M. 3 ♀ Panama. 2 ♂ 2 ♀ Colombia. 1 ♂ Venezuela.
(b). Anellus lobes large, triangular, serrate. Lower part of cuiller rounded, instead of pointed. Above, like *tonga*. Below, with a strong violet gloss and unh only slightly paler tornally, markings well developed.

Sub-sp. **trax** nov: ♂ Ecuador: type B.M.
B.M. 1 ♂ type. 1 ♂ "Amazons".
(c). Anellus lobes similar to *trax*, but smaller: clasps as in *tonga*. Above, markings conspicuous, resembling *dimidiata*, pale grey towards apex and termen F. Unh tornal area broadly whitish.

Sub-sp. **theon** Plötz 1882: ♂ S. America: copy of unpublished figure in B.M. Fig Seitz.
Synonyms. *hersilia* Hayward 1938: ♂ Argentine (Salta): genitalia figured. Fig Hayward 1948: ♂ and genitalia: *nema* Williams & Bell 1939: ♂ Matto Grosso: figure of genitalia.
B.M. 1 ♂ Peru (Carabaya). 1 ♂ Bolivia (San José). 5 ♂ Matto Grosso.

8 (7). ♂ valva without a projecting spine from the tip: anellus lobes small, spined: clasps symmetrical. ♂ F 15 mm.

ranta. 2 sub-species.
(a). Unh uniformly dark. Above markings complete and distinct, violet gloss faint.

Sub-sp. **ranta** nov: ♂ Brazil, Rio de Janeiro, Laguna de Sacuaresma, Sept 1884, P. Germain: type B.M.
B.M. 1 ♂ Minas Geraes (San Jacinthe Valley). 1 ♂ type.

(b). Unh tornal third white, with a broad, dark discal band and faint submarginal spots. Above, dark purple glazed with faint markings.

Sub-sp. **rancida** nov: ♂ Paraguay: W. Foster: type B.M.
B.M. Only the type.

9 (1b). ♂ unh with a glandular oval patch over the origin of vein 7 and the adjoining radius. Genitalia, valva longer than cuiller, without a projecting spine: gnathos erect, parallel to uncus: anellus lobes present, but small and not serrate. Violet flush on wings absent or faint. ♂ F 15 mm.

dimidiata. 3 sub-species.

(a). Unh no tornal white area. Seen ventrally, gnathos wider than uncus and nearly as long. Left cuiller with 2 equal projecting spined limbs.

Sub-sp. **dimidiata** Herrich-Schäffer 1870: ♂ Mexico. Fig in Seitz is of *costimacula*.

Synonyms. *didia* Möschler 1876: ♀ Surinam: figured (underside). Fig Godman & Salvin, ♂, ♀ and genitalia.
corinna Plötz 1882.
nivonicus Plötz 1884: ♀ Mexico.
bilinea Mabille 1889: ♂ Chiriqui: figured.
bobae Weeks 1906: ♂ Venezuela. Fig Weeks 1911.
hypsipyle Hayward 1947: ♂ Colombia: genitalia figured.

B.M. 25 ♂ 5 ♀ Mexico. 11 ♂ 3 ♀ Guatemala. 1 ♂ Honduras. 1 ♂ Salvador. 1 ♂ Nicaragua. 10 ♂ Costa Rica. 2 ♂ 1 ♀ Panama. 1 ♂ 3 ♀ Colombia. 5 ♂ Venezuela. 1 ♂ 3 ♀ Trinidad. 1 ♂ 1 ♀ Tobago. 3 ♂ Br Guiana. 1 ♀ Fr Guiana. 2 ♂ Ecuador (Chimbo). 1 ♂ Iquitos, Upper Amazons.

(b). Unh more or less white about tornus and a conspicuous tornal dark spot. Left cuiller with a single long upper limb.

Sub-sp. **meno** Mabille 1889: ♂ ? loc: figured. Fig Godman & Salvin of ♂: Seitz (badly): genitalia by Williams & Bell 1939 are *tyana*: Hayward 1948, ♂ and genitalia (? *tyana*).

Synonym. *brasiliensis* Williams & Bell 1939: ♂ Minas Geraes: genitalia figured.

B.M. 7 ♂ 10 ♀ Pará. 1 ♂ Minas Geraes. 2 ♂ Espirito Santo.

(c). Unh with a tornal white area, but without a tornal dark spot. Gnathos shorter: clasps simpler and nearly symmetrical. Wings more rounded.

Sub-sp. **zamia** Plötz 1882: ♂ S. America. Fig Seitz.
Synonyms. *subostrina* Hayward 1933: ♂ Buenos Ayres: figured, ♂ and genitalia.
hertha Hayward 1938: ♂ Argentine: genitalia figured. Fig Hayward 1948, ♂ and genitalia.
B.M. 2 ♂ S. Brazil (Novo Friborgo). 1 ♂ 1 ♀ Paraguay. 1 ♀ Argentine.

10a (1a). Uph without a hair tuft.
10 (11). Upf with basal, central and discal bands as usual: unh with glandular scaling about base of vein 7 and the adjoining radius. Gnathos absent and no anellus lobes: clasps nearly symmetrical and cuiller with a central limb. Above, violet glossed except on the dark markings which are conspicuous and complete. Unh varies from plain brown to the presence of a well-marked tornal white area. ♂ F 15 mm.

chapada Williams & Bell 1939: ♂ Chapada, Matto Grosso: genitalia figured.
Synonym. *rubescens* Plötz 1882: ? loc: tracing of unpublished figure in B.M. Homonym by Möschler 1876.
B.M. 1 ♂ Bahia. 6 ♂ Matto Grosso. 1 ♂ Goyaz. ♂ 1 Rio Grande. 3 ♂ Argentine.

11 (10). Upf brown with basal and central narrow dark bands, each reaching to vein 1: uph unmarked. Unf with 3 grey areas before the apex: unh dorsum broadly grey penetrated along the inner edge by 3 dark bands from the dark ground. ♂ F 16 mm.

demetrius Plötz 1882: Brazil: copy of unpublished figure in B.M. Fig Seitz, where the pale areas below are too white.
B.M. None.

E.22. NOCTUANA Bell 1937: type *noctua* Felder: fixed by author.

Wings produced: F costa 1½ times as long as dorsum: H dorsum > costa. F apex truncate to vein 6 and more or less concave thence to apex: vein 12 ends before end cell and vein 11 ends over end cell. H dorsum more or less concave. Antennae = ½ costa, bent to apiculus beyond thickest part of club: nudum 3/12: apiculus much < rest of club. Palpi long, longer than head. ♂ with or without a costal fold upf: hind tibiae without a hair tuft. A compact genus with genitalia of the same type: uncus slender, undivided.

1 (2a). Uph with a broad, bluish-white area. Upf with 2 or 3 apical spots, decreasing towards termen.

noctua. 3 sub-species.

(a). Uph bluish-white area opaque. ♂ upf with a costal fold. ♂ F 19 mm.

Sub-sp. **bipuncta** Plötz 1884: ♂ Mexico. Fig Seitz as *lactifera.* B.M. 21 ♂ 7 ♀ Mexico. 9 ♂ 1 ♀ Guatemala. 8 ♂ Nicaragua.

(b). Only differs in lacking the costal fold.

Sub-sp. **lactifera** Butler & Druce 1872: ♂ Costa Rica: type B.M. Fig Godman & Salvin, ♂ and genitalia: Seitz fig is *bipuncta*. B.M. 27 ♂ 9 ♀ Costa Rica. 5 ♂ 1 ♀ Panama. 5 ♂ Colombia (R. Dagua and coll Felder).

(c). ♂ uph bluish-white area translucent. Unh more variegated. Two more or less intergrading seasonal forms. First form, ♂ F 16 mm., costal fold conspicuous: uph pale area narrow, not entering cell: unh whitening of tornal area more conspicuous and central spots in spaces 1c–3 white. Second form, ♂ 19 mm.: costal fold faint: uph white area broad, entering cell: unh whitening of tornal area reduced and central spots in spaces 1c–3 small, tawny.

Sub-sp. **noctua** Felder 1867: ♂ Colombia: type B.M. figured. Fig Seitz.

B.M. 1 ♂ Panama. 14 ♂ 2 ♀ Colombia (Manizales. Honda. Bogotá). 13 ♂ 1 ♀ Venezuela. 1 ♀ Ecuador. 4 ♂ Peru (Chanchamayo. Moyabamba).

2a (1). Uph without a bluish-white area.

2b (4a). Uph conspicuously marked with dark brown spots on a pale brown ground. Upf with 2 apical spots, the lower conspicuously elongate.

2 (3). Uph markings extend to base. Wings more rounded and crenulation not pronounced. ♂ with a costal fold upf. ♂ F 15 mm. Two seasonal forms, one of which

(*brunneofusca*) has the tornal half unh whitened, and the other (*uniformis*) does not.

brunneofusca Mabille & Boullet 1917: ♂ Peru.
Synonym. *uniformis* Mabille & Boullet 1917: ♂ Peru.
B.M. 7 ♂ 1 ♀ Ecuador (Loja). 4 ♂ Peru (Charape. Amazonas, Chachapoyas).

3 (2). Uph base entirely dark brown. Wings produced and crenulation very pronounced. Unh tornal half always whitened. ♂ F 18 mm.: no costal fold.

diurna Butler 1870: ♂ no loc: type B.M. Fig Seitz.
Synonym. *bellinita* Plötz 1884: Rio.
B.M. 32 ♂ 8 ♀ S. Brazil (São Paulo. Paraná. Novo Friborgo. Rio).

4a (2b). Uph entirely dark brown, markings very obscure or absent. Upf with 2 sub-equal apical spots.
4 (5). Unh with submarginal markings only red or ochreous. ♂ F 18 mm.: with a costal fold.

stator Godman & Salvin 1899: ♂ Mexico: type B.M. figured, ♂ and genitalia. Fig Seitz.
B.M. 21 ♂ 3 ♀ Mexico. 18 ♂ 1 ♀ Guatemala. 1 ♀ Honduras. 4 ♂ Nicaragua. 1 ♂ Costa Rica. 7 ♂ Panama. 6 ♂ 3 ♀ Colombia. 2 ♂ 1 ♀ Venezuela. 6 ♂ Trinidad. 1 ♂ Ecuador (Quito). 1 ♂ 1 ♀ Peru.

5 (4). Unh with basal, central and submarginal red to yellow markings. ♂ F 19 mm.: no costal fold.

haematospila Felder 1867: ♀ Venezuela: type B.M.: figured. Fig Seitz.
B.M. 43 ♂ 4 ♀ Colombia. 31 ♂ 3 ♀ Venezuela. 9 ♂ Ecuador (Rio Pastaza. Ambato). 28 ♂ Peru (Huancabamba. Marcapata. Chanchamayo. R. Tabaconas. Moyabamba. Cuzco. Amazonas. Carabaya. Huanco). 7 ♂ Bolivia (Yungas, La Paz. Cochabamba. Chulumani).

E.23. MORVINA Evans (p. 10): type *morvus* Plötz: fixed by author.

Antennae = ½ costa: bent to apiculus at thickest part of the slender club: nudum 8/19 in type, 2/17 in the other species. Palpi porrect: third segment very short: smooth.

♂ no costal fold: hind tibiae with a recumbent hair pencil against the inside of the tibiae and not entering a double pouch at the end of the thorax. Upf with hyaline apical spots and an ocellus mid cell with one or two pupils: the dark discal band dislocated at vein 4. H produced, vein 1a > vein 8. Uncus divided: clasp with a style.

1 (2a). Antennal apiculus long, nudum 8/19. ♂ F 22 mm.
morvus. 3 sub-species.
(a). Unh yellowish-brown, paler at dorsum beyond vein 1b: dark macular bands complete and with a tornal black spot.
Sub-sp. **cyclopa** nov: ♂ Bolivia: type B.M.
B.M. 2 ♂ 1 ♀ Br Guiana. 2 ♂ Bolivia (Cochabamba).
(b). Unh dorsal half white, with faint macular pale bands and conspicuous tornal black spot. Uph before termen broadly bluish-white.
Sub-sp. **para** nov: ♂ Pará: type B.M.
B.M. 2 ♂ 2 ♀ Pará and Santarem.
(c). Unh dorsal half white, unmarked. Uph broadly paler brown before termen.
Sub-sp. **morvus** Plötz 1884: ♂ Brazil. Fig Seitz.
B.M. 2 ♂ 2 ♀ Bahia. 6 ♂ 2 ♀ S. Brazil (Espirito Santo. Rio). 1 ♀ "Argentine".

2a (1). Antennal apiculus short, nudum 2/17. Smaller.
2 (3). Unh not ochreous. Clasp with broad, straight cuiller and short style. Upf usually a small hyaline discal spot in space 3 and sometimes also in space 2.
fissimacula. 4 sub-species.
(a). Unh white below vein 6, with faint submarginal spots, no tornal dark spot. Palpi pale yellow. ♂ F 20 mm.
Sub-sp. **pelarge** Godman & Salvin 1893: ♂ Panama: type B.M.: figured, ♂ and genitalia. Fig Seitz.
B.M. 2 ♂ 5 ♀ Nicaragua. 1 ♂ Panama.
(b). Unh white area as in *pelarge*, but with brown bands thereon. Unf a more or less conspicuous tornal white area. Palpi white. Smaller ♂ F 17 mm.
Sub-sp. **lenia** nov: ♂ Colombia, Magdalena, El Banco: C. Allen: type B.M.
B.M. 2 ♂ 1 ♀ Colombia.

(c). Unh pale brown, no white area: dark bands complete and a black tornal spot. ♂ F 17 mm.

Sub-sp. **rema** nov: ♂ Amazons, Santarem: M. de Mathan: type B.M.

B.M. 10 ♂ 8 ♀ Amazons (Ega to Santarem).

(d). Unh as in *rema*, but no tornal black spot, sometimes a short dash. Palpi yellow. ♂ F 18 mm.

Sub-sp. **fissimacula** Mabille 1878: ♀ E. Brazil: type B.M. Fig Seitz as *bromius* Stoll (plate 174f).

B.M. 1 ♀ "Costa Rica". 1 ♀ "Cayenne". 2 ♀ E. Brazil. 1 ♂ 1 ♀ Minas Geraes. 6 ♂ 8 ♀ S. Brazil (Espirito Santo. Rio). 1 ♀ "Argentine".

3 (2). Unh ochreous. Generally darker above. Clasp with the cuiller narrow, angled: style long and pointed. ♂ F 17 mm.

falisca. 3 sub-species.

(a). Described as having upf a single apical spot and a single pupil to the ocellus. Unh tornally yellow, with 2 dark bands.

Sub-sp. **lachesis** Dyar 1914: ♂ Mexico.

B.M. None and identity uncertain.

(b). Unh bright yellow with dark macular bands and a faint tornal black spot. Upf 3 irregular apical spots: 1 (upper) or 2 pupils to the ocellus.

Sub-sp. **falisca** Hewitson 1876: ♀ Fr Guiana.

B.M. 5 ♂ 2 ♀ Fr Guiana. 2 ♂ Br Guiana.

(c). Like *falisca*, but unh much darker, yellowish-brown (1 ♂ is brown), the dark bands better marked, particularly the black tornal spot.

Sub-sp. **falia** nov: ♂ Iquitos, Upper Amazons: July 1932: G. Klug: type B.M.

B.M. 1 ♀ Peru (Chanchamayo). 3 ♂ Iquitos.

E.24. MYRINIA Evans (p. 10): type *Cyclosemia myris* Mabille: fixed by author.

Antennae = $\frac{1}{2}$ costa, bent at or beyond the thickest part of the club: nudum typically 10/12: apiculus > nudum on club. Palpi short porrect, 3rd segment as long as 2nd. Upf ocellus in cell with one or two pupils: discal dark band dislocated at end of vein 4: no apical hyaline spots. ♂ F no costal fold: hind tibiae with a hair tuft fitted into a thoracic pouch: short tuft of stiff hairs at base of costa uph overlying a swollen portion of the cubitus unf shortly after its origin. Uncus undivided but furnished dorsally with a pair of pointed processes appressed to the back of the uncus: clasps asymmetrical.

1 (2a). Below ochreous brown, the ocellus and the dark bands distinct. ♂ F 18 mm. Nudum 7/13.
binoculus Möschler 1876: ♀ Surinam: figured. Fig in Seitz is of *myris*.
B.M. 3 ♂ 3 ♀ Fr Guiana. ♂ 1 Amazons.

2a (1). Below dark brown, the ocellus and the dark bands faint or obsolete.
2 (3a). Cuiller of right clasp tapered, as long as cuiller of left clasp: style of left clasp shorter than the cuiller. Unh with a purple wash. ♂ F 20 mm.
myris Mabille 1897: ♂ Brazil: type B.M. Fig Seitz as *binoculus*.
B.M. 1 ♂ Fr Guiana. 1 ♂ Peru (La Merced). 2 ♂ Bolivia (Muschay). 2 ♂ Brazil (Rio).

3a (2). Cuiller of right clasp short and rounded: style of left clasp longer than the cuiller. Unh no purple wash.
3 (4). Small, ♂ F 17 mm. Nudum 3/13.
santa. 2 sub-species.
(a). Unh dark brown, tornal black spot conspicuous.
Sub-sp. **monka** nov: ♂ Pará: A. Miles Moss: type B.M.
B.M. 1 ♀ Br Guiana. 1 ♂ Peru (Carabaya). 2 ♂ 1 ♀ Pará. 1 ♂ Minas Geraes.
(b). Unh more ochreous-brown, no dark tornal spot.
Sub-sp. **santa** nov: ♂ Espirito Santo (coll Hewitson): type B.M.
B.M. 2 ♂ 1 ♀ Espirito Santo.

4 (3). Large, ♂ F 23 mm. Nudum 10/17. Unh tornal black spot conspicuous. Palpi above white tipped at end of second segment.
laddeyi Bell 1942: ♂ Ecuador: figure of genitalia.
B.M. 2 ♂ Br Guiana. 1 ♂ Fr Guiana. 1 ♂ 1 ♀ Pará.

E.25. XISPIA Lindsey 1925: type *quadrata* Mabille: fixed by author.
Synonym. *Praxis* Mabille 1889: type *quadrata* Mabille: sole species included: homonym *Praxis* Guenée 1852.

Antennae = ½ costa, shaft plain: nudum 11/11 to 12/12. Palpi short, porrect. Typically, F broadly truncate and termen concave from vein 2 to dorsum: H with a broad tooth at end of vein 3 and concave on either side of it. ♂ no costal fold: hind tibiae with a thin recumbent brush on the outside. Uncus broad ending in a bulbous tip between the pointed arms of a bifid projection from the tegumen behind the uncus.

1 (2). Upf rather pale brown with a large black quadrate patch before end of cell, extending narrowly to the costa and broadly into space 3: small black spot in space 3 with a minute hyaline centre. Peculiar wing shape very pronounced. ♂ F 18 mm.
quadrata Mabille 1889: Masaury: figured.
B.M. 1 ♂ Bolivia.
2 (1). Upf pale brown with a conspicuous blind black ocellus in cell, ringed dull ochreous: faint, irregular, narrow postdiscal and submarginal bands. Uph the submarginal dark band macular, ending in 2 conspicuous black spots in space 1c. The wing shape is more like that of *Cyclosemia*. ♂ F 17 mm.
satyrus Jorgensen 1935: ♂ Paraguay. Fig Hayward, 1948, ♂ and genitalia.
B.M. 4 ♂ Paraguay.

E.26. OCELLA Evans (p. 11 ante): type *albata* Mabille: fixed by author.

Antennae = ½ costa: shaft plain: bent beyond thickest part of club, nudum 8/8: apiculus < nudum on club. Palpi porrect = head. Upf with a black ocellus in cell, single pupilled. No secondary sexual characters. Genitalia of *Nisoniades* type: uncus tapered, undivided: aedoeagus bent forward and expanded: clasps broad and asymmetrical.

1a (3). Upf with a small ocellus in space 2 below the ocellus in cell. H tornus rounded: termen F and H convex.

1 (2). Above, central third white, remainder pale brown with dark bands. Below, as above. ♂ F 18 mm.
albata Mabille 1888: ♂ Chanchamayo: type B.M. figured. Fig Seitz.
B.M. 25 ♂ Peru (Chanchamayo. El Porvenir. Cosnipata. Marcapata. San Remon). 24 ♂ Bolivia (Yungas. Rio Songo. Cochabamba).

2 (1). Above, grey-brown with dark bands as in *albata*. Unh base blue, outwardly white with dark bands. F 17 mm.
diopthalma Plötz 1884. ? loc. Fig Seitz.
B.M. None.

3 (1a). Upf without an ocellus in space 2. H tornus produced: termen F and H straight. Above and below pale brown with dark bands, yellower tone below. ♂ F 17 mm.
monopthalma Plötz 1884: Brazil. Fig Seitz.
Synonym. *trigonilla* Schaus 1902: Petropolis.
B.M. 1 ♂ Novo Friborgo. 1 ♀ Paraná.

E.27. CYCLOSEMIA Mabille 1878: type *herennius* Stoll: fixed by author.

Antennae = ½ costa, typically bent just beyond the thickest part of the club: nudum 2/9. Palpi third segment rather long, second short. Upf with bipupilled (rarely a single pupil) ocellus in cell: dark bands F and H conspicuous: discal band continuous and regular from vein 1 to costa, no apical spots. ♂ no costal fold: hind tibiae typically with a recumbent tuft outside the leg, no thoracic pouch. Uncus undivided, slender: clasps symmetrical, usually with a style.

1a (7). ♂ no tuft on the hind tibiae.
1b (5a). Nudum long, 6/11.
1c (3a). Unh pale azure blue right up to the costa, dark central and discal bands only visible by transparency from uph. Unf base blue turning whitish around the ocellus and the dark discal band.
1 (2). Unh with a rather broad zigzag submarginal brown band. Wings rounded. ♂ F 18 mm.
lathaea Hewitson 1878: ♀ Bolivia: type B.M. Fig Seitz.

B.M. 1 ♂ Ecuador. 1 ♂ Peru (Chanchamayo). 2 ♂ Bolivia (Chariplaya).

2 (1). Unh only brown at the apex. Wings produced. ♂ F 17 mm.
leppa nov: ♂ R. Songo, Bolivia: type B.M.
B.M. 1 ♀ Peru, Cuzco. 1 ♂ Bolivia.

3a (1c). Unh costa, at least, brown. ♂ F 18 mm.
3 (4). Unh pale yellowish-brown, dorsal half more or less bluish-white. Tip of style smooth.
anastomosis Mabille 1878: ♂ E. Brazil: type B.M. Fig Seitz: Godman & Salvin, ♂ and genitalia.
B.M. 3 ♀ Mexico. 3 ♂ 1 ♀ Guatemala. 1 ♂ 1 ♀ Honduras. 1 ♂ 1 ♀ Nicaragua. 1 ♂ Costa Rica. 2 ♂ 1 ♀ Panama. 2 ♂ Colombia. 3 ♀ Ecuador (Balzapamba). 1 ♀ "Amazons".

4 (3). Unh dark brown, turning yellowish-brown dorsally: tornal black spot present or absent. Tip of style spined.
earina Hewitson 1878: ♂ Pará: type B.M.
B.M. 2 ♂ 1 ♀ Br Guiana. 1 ♀ Fr Guiana. 1 ♀ S. Peru (Chaquimayo). 6 ♂ 6 ♀ Amazons (Ega to Pará). 1 ♂ Maranham.

5a (1b). Nudum short, 2/9. Smaller, ♂ F 14 mm.
5 (6). Unh, dorsal two-thirds white (may be sullied) with more or less distinct narrow dark bands and lines.
lyrcaea Hewitson 1878: ♀ ? loc: type B.M.
Synonyms. *caecus* Plötz 1884: ♂ ? loc.
gratiosa Mabille 1897: ♀ Chiriqui: type B.M.
B.M. 2 ♀ No loc. 1 ♀ Chiriqui. 1 ♂ Amazons. 4 ♀ Espirito Santo.

6 (5). Unh entirely dark yellowish-brown with broad bands.
pedro Williams & Bell 1940: ♂ Honduras: genitalia figured.
B.M. 1 ♂ 1 ♀ Colombia. 2 ♂ Br Guiana. 2 ♂ Amazons.

7 (1a). ♂ with a recumbent tuft on outside of hind tibia. Nudum 2/9. Unh blue.
herennius. 3 sub-species.
(a). ♂ F 16 mm. Unh entirely light azure blue, unmarked. Cuiller of clasp blunt.

Sub-sp. **subcaerulea** Schaus 1913: ♂ Costa Rica. Fig Seitz, B.M. 1 ♂ Costa Rica. 1 ♂ Panama. 2 ♂ Colombia. 2 ♂ 1 ♀ Ecuador (Cachabe).
(b). ♂ 15 mm. Unh with broad dark darkings. Cuiller of clasp blunt.

Sub-sp. **herennius** Stoll 1782: ♀ Surinam: figured. Fig Seitz.
B.M. 1 ♂ Trinidad. 1 ♂ Br Guiana. 1 ♀ Surinam. 3 ♂ 5 ♀ Fr Guiana. 9 ♂ 4 ♀ Pará.
(c). ♂ F 16 mm. Unh unmarked pale blue. Uph pale areas grey. ♀ unf light blue to nearly white, as in *lathaea*. Cuiller of clasp tapered to a point.

Sup-sp. **elelea** Hewitson 1878: ♀ "Fr Guiana": type B.M. B.M. 1 ♀ type (probably from Peru). 3 ♀ Peru (La Merced. Carabaya. Yahuarmayo). 5 ♂ 2 ♀ Amazons (Ega to Santarem).

E.28. GORGOPAS Godman & Salvin 1894: type *chlorocephala* Herrich-Schäffer: fixed by Lindsey 1925 as *viridiceps* Butler & Druce, which is a synonym of *chlorocephala*.

Antennae = ½ costa, bent to a hooked apiculus just after the thickest of the club: nudum 5/10 and apiculus rather longer than nudum on club. Palpi short, porrect. H produced at tornus, vein 1a > vein 8: angled at apex. ♂ with a costal fold: no tibial hair tuft: fringe of long hairs along vein 1b from base to termen. Uncus slender, undivided. A compact genus: all the species have a metallic green head, often cupreous in a side light.

1 (2a). Above, wing bases, thorax and inner half of abdomen green in addition to the head and palpi. ♂ F 15 mm.

trochilus Hopffer 1874: Peru. Fig Seitz, plate 174b as *chlorocephala* and by Hayward 1948, ♂ and genitalia.
Synonym. *cupreus* Mabille 1877: ♂ E. Brazil: type B.M.
B.M. 3 ♂ Colombia. 13 ♂ Ecuador (Sarayacu. R. Pastaza. Upper R. Napo). 22 ♂ Peru (Chanchamayo. Huanco. Carabaya. Tarapote). 31 ♂ Bolivia (Reyes. La Paz. Santa Cruz. Cochabamba. Coroico. Chulumani). 15 ♂ 2 ♀ Upper Amazons (Pebas. Nauta. Iquitos. S. Paulo de Olivenca). 1 ♂ Matto Grosso. 5 ♂ Paraguay.

2a (1). Wing bases not green.

2 (3a). Above, entire thorax green. Upf rather pale brown with a black spot mid cell with 1 or 2 minute hyaline pupils. ♂ F 17 mm.

petale Mabille 1888: ♂ São Paulo: figured.

Synonyms. *hybridus* Mabille 1891: ♂ Brazil.

metallica Mabille 1897: ♂ S. America: type B.M.

B.M. 15 ♂ S. Brazil (Paraná. São Paulo).

3a (2). Above, green colour confined to palpi, head, collar and adjoining ends of patagia.

3b (5). Above, dark brown with a paler brown submarginal band.

3 (4). Unh discal and submarginal dark bands equally narrow. ♂ F 17 mm.

chlorocephala. 2 sub-species.

(a). Unh dorsal half pale yellowish-brown.

Sub-sp. **chlorocephala** Herrich-Schäffer 1870: S. America. Fig in Seitz is *trochilus*, also by Hayward 1948.

Synonyms. *viridiceps* Butler & Druce 1872: ♂ Costa Rica: type B.M. Fig Godman & Salvin, ♂ and genitalia: Seitz. *capitans* Schaus 1902: ♂ Venezuela.

B.M. 1 ♀ Nicaragua. 3 ♂ Costa Rica. 33 ♂ Colombia. 2 ♂ Venezuela. 19 ♂ Ecuador (Loja. Ambato. R. Pastaza. Baños). 40 ♂ Peru (Chanchamayo. Charape. Marcapata. Huambo. Inambari. Chaquimayo. Perene. Moyabamba). 22 ♂ Bolivia (Cochabamba. Yungas. Chariplaya). 1 ♂ Amazons.

(b). Unh dorsal half more or less densely white scaled.

Sub-sp. **sneiderni** Bell 1947: ♂ Cauca, Colombia.

B.M. 2 ♂ Colombia (Cauca). 9 ♂ Ecuador (Paramba).

4 (3). Unh darker, discal band very much wider: both the discal and submarginal dark bands wider than the pale band between them. Otherwise as *chlorocephala*, but larger, ♂ F 20 mm. and the cuiller of the clasp is straight and narrow, while in *chlorocephala* it is broad with a turned-in pointed tip.

gutta nov: ♂ Chanchamayo, Peru: type B.M.

B.M. 5 ♂ Peru (Chanchamayo. Pozuzo. Huanco. Rio Colorado).

5 (3b). Above, outer half (entire wing in a side light) shining golden-brown, with distinct narrow dark bands. Unh dark brown with the dark markings very obscure or absent. Superficially resembles *Achlyodes pallida* and *Mimia phidyle*. ♂ F 21 mm.

agylla Mabille 1897: ♂ Bolivia: figured: type B.M.
Synonym. *chlorocephala* Draudt 1922: ♂ Bolivia: figured. Homonym (Herrich-Schäffer 1870).
B.M. 40 ♂ Bolivia (Chairo. Coroico. La Paz. Cochabamba. Chariplaya).

E.29. VIOLA Evans (p. 11): type *alicus* Schaus: fixed by author.

A genus with genitalia of the *Nisoniades* type, but with the appearance, wing-shape and form of antennal club of *Staphylus*.

Antennae = ½ costa: shaft plain: bent to apiculus at thickest part of club and at, or just before, the beginning of the nudum of 12 segments: apiculus half the length of the rest of the club. Palpi = head, but longer in *egra*. Wings not produced: H quadrate. ♂, in all species except *violella*, with a hair tuft uph springing from a curved seam behind the origin of vein 8 and overlying the origin of vein 7, which is not modified.

1a (5). Above, dark brown with violet-grey areas and markings. Palpi = length of head.
1b (4). ♂ uph with a hair tuft from base of costa.
1c (3). Upf the central and discal broad dark bands parallel. ♂ F 12 to 14 mm.
1 (2). Uph the hair tuft in the ♂ bright yellowish-brown, contrasting with the ground colour. Below, margins broadly dark brown, violet glossed.

alicus Schaus 1902: ♂ S.E. Brazil: co-type B.M.
The figures given by Hayward 1938 and 1948, and by Williams and Bell 1939 seem referable to *minor*.
B.M. 2 ♂ Paraná. 1 ♀ São Paulo.

2 (1). Uph the hair tuft in the ♂ brown, not contrasting with the ground colour. Below without the violet gloss.

minor Hayward 1933: ♂ Argentine: figured, with genitalia. Fig Hayward 1948, ♂ and genitalia.
Synonyms. *herse* Hayward 1938: ♂ Argentine: genitalia figured.
hermione Hayward 1939: ♂ Argentine: genitalia figured.
B.M. 1 ♂ Matto Grosso. 13 ♂ 4 ♀ S. Brazil (Rio. Petropolis. São Paulo). 3 ♂ Paraguay. 5 ♂ 1 ♀ Argentine.

3 (1c). Upf the central and discal band Y-wise, more or less uniting at vein 4, as in *violella*, but the violet wash is absent. Uph ♂ hair tuft brown, paler than in *alicus*. Large, ♂ F 16 mm.
olla nov: ♂ S. Paulo de Olivenca: A. M. Moss: type B.M.
B.M. 2 ♂ Upper Amazons (type, San Gaban, Solimoes).

4 (1b). ♂ uph without a hair tuft. Upf dark central and discal band Y-wise from vein 4. Above, usually with a violet gloss, but very variable in respect of intensity of markings and size, ♂ F 12 to 14 mm.
violella Mabille 1897: ♂ Brazil: type B.M.
Synonyms. *olinda* Strand 1920: ♀ Pernambuco.
conjuncta Riley 1929: ♂ Brazil: type B.M.
alicoides Hayward 1938: ♂ Argentine: genitalia figured.
? *hecata* Hayward 1947: ♂ Colombia: genitalia figured. Fig Hayward 1948, ♂ and genitalia.
B.M. 1 ♂ 1 ♀ Surinam. 11 ♂ Bolivia (Yungas, La Paz. Chulumani. Buenavista. Tanampaya. Santa Cruz). 7 ♂ 2 ♀ Lower Amazons. 8 ♂ 1 ♀ Pernambuco. 1 ♂ Bahia. 2 ♂ Minas Geraes. 5 ♂ 1 ♀ Goyaz. 8 ♂ 3 ♀ "Brazil". 3 ♂ 2 ♀ S. Brazil (Rio. São Paulo, Paraná.) 14 ♂ 1 ♀ Paraguay.

5 (1a). Above, dark velvet brown with faint paler brown markings: upf an area at end cell and a postdiscal row of small spots on F and H. Unf as above, paler in space 1b. Unh dark brown, the discal spots more distinct and with some central and submarginal spots. Uph the hair tuft in ♂ brown. ♂ F 15 mm. Palpi long.
egra nov: ♂ Colombia, Lake Sapatoza, Chirigua: Oct–Nov 1924: C. Allen: type B.M.
B.M. 5 ♂ 1 ♀ type loc. 3 ♂ Colombia. 1 ♂ Venezuela.

E.30. BURCA Bell & Comstock 1948: type *concolor* Herrich-Schäffer: fixed by authors.

Antennae = ½ costa: apiculus obtuse at thickest part of club and its centre, nudum 13. Palpi short, porrect. Wing shape, F not produced: H quadrate (as in *Bolla*), produced at end of vein 4, angled at apex, tornus rounded, slightly concave at space 4–5: veins 1a and 8 sub-equal. ♂ secondary sexual characters peculiar: no tibial tuft: costal fold present in 2 species and covers a long hair pencil: narrow oblique brands present in 3 species in middle of wing, under vein 2, over vein 1 (faint in *braco*), and under vein 1. Uncus undivided.

1a (5). F not > 20 mm.
1b (3a). ♂ above, uniform dark brown; with costal fold. ♀ upf no pale bar mid cell. Palpi whitish below.
1 (2). ♂ upf with brands. ♀ upf with a hyaline spot in space 3 and often in space 2. Unh with dark red and ochreous scaling, sparse in ♂, dense in ♀. ♂ F 18 mm.
braco Herrich-Schäffer 1864: ♂ Cuba. Fig Seitz: Williams 1931, ♂, ♀ and genitalia: Bell & Comstock 1948, genitalia. Synonyms. *undulatus* Herrich-Schäffer 1864: ♀ Cuba. *isabellina* (Prittwitz MS) Plötz 1884.
B.M. 15 ♂ 14 ♀ Cuba. 1 ♀ Bahamas. 2 ♀ Honduras.

2 (1). ♂ upf no brands. ♀ upf no discal hyaline spots. ♂ F 16 mm.
stillmani Bell & Comstock 1948: ♂ Haiti: genitalia figured.
B.M. None.

3a (1b). ♂ above, outwardly paler. ♀ upf, with a pale bar mid cell. ♂ no costal fold: brands present.
3 (4). Palpi whitish below. Unh grey scaled. ♂ 16 mm.
hispaniolae Bell & Comstock 1948: ♂ Haiti: genitalia figured.
B.M. 16 ♂ 11 ♀ Haiti.

4 (3). Palpi brown below. Unh dark brown with very sparse dark red and yellow scaling. ♂ F 14 mm.
concolor Herrich-Schäffer 1864: ♀ Cuba. Fig Williams 1931: genitalia by Bell & Comstock 1948.
B.M. 18 ♂ 8 ♀ Cuba.

5 (1a). ♀ F 27 mm. Plain dark brown except for small hyaline white spots in spaces 2 and 3, discal, 4, 5, 6, 7, 8 apical. Wing shape and antennae of *Burca* and not of *Ephyriades*.
cubensis Skinner 1913: ♀ Cuba. Fig Williams 1931.
B.M. None.

E.31. BOLLA Mabille 1904: type *phylo* Mabille: fixed by Lindsey 1921 as *pullata*, which is a sub-species of *phylo*.

A genus of dark species with insignificant markings looking all alike and generally requiring an examination of the genitalia for determination. *Bolla* resembles *Staphylus* in respect of the quadrate wing shape, the obtuse antennal apiculus and the short porrect palpi. It differs from *Staphylus* in that the species are larger, nudum of antennal club with 13 segments and the termen of both wings is more even. ♂ with or without a costal fold: no leg tuft. Upf never with a hyaline cell spot.

1a (20a). With more or less superscaling of grey or ochreous scales, at least apparent near tornus unh.
1b (4a). Unf outer third conspicuously paler.
1d (3). ♂ with a costal fold upf.
1 (2). Upf generally with 3 hyaline apical spots and 4 discal, in spaces 1b (2 spots) 2 and 3. Unf outwardly broadly ochreous. ♂ F 20 mm. Wings more produced than usual, leading to *Gorgopas*.
cylindus Godman & Salvin 1896: ♂ Costa Rica: type B.M.: figured ♂ and genitalia. Fig Seitz.
B.M. 2 ♂ Honduras. 13 ♂ 1 ♀ Costa Rica.

2 (1). Upf with a well-marked hyaline spot in space 2, dots in spaces 3 and 8, opaque white dots in space 1b and a row of dark dots in spaces 4–7: apical third of wing conspicuously paler. Uph dull ochreous bar at end of cell: the discal spots small and sharply defined. Unf with olive superscaling at apex extending to dorsum and end cell, leaving sharply defined continuous dark discal small spots and a faint macular dark submarginal band. Unh as uph but darker and the spots sharply defined. ♂ F

20 mm. ♀ above brighter, reddish-brown. Unh the outer pale area bright orange-yellow.

cybele nov: ♂ Coatepec, Mexico: type B.M.
B.M. 1 ♂ type. 1 ♀ "Mexico".

3 (1d). ♂ upf no costal fold. Marked as in *cybele*, but uph the reddish-brown spots are larger. Wings more rounded. ♂ F 18 mm.

cyclops. 2 sub-species.
(a). ♂ unf outer area dusky ochreous.
Sub-sp. **sonda** nov: ♂ Mexico, Orizaba: type B.M.
B.M. 10 ♂ Mexico (Orizaba. Jalapa).
(b). ♂ unf outer area bright yellow.
Sub-sp. **cyclops** Mabille 1876: ♂ Colombia: type B.M.
B.M. 1 ♂ Guatemala. 2 ♂ Colombia.

4a (1b). Unf uniform, not conspicuously paler outwardly.
4b (6a). End of uncus, seen ventrally, broad and centrally concave: gnathos well developed.
4 (5). ♂ upf with a narrow costal fold. Tegumen without projecting side processes. Upf ♂ with 2, ♀ with 3, hyaline apical spots: pale and dark areas contrasting. ♂ F 17 mm.

mancoi Lindsey 1925: ♂ Peru: figured ♂ and genitalia.
B.M. 1 ♂ 1 ♀ Peru (Chanchamayo. Carabaya). 3 ♂ Bolivia (Yungas, La Paz. Santa Cruz).

5 (4). ♂ upf no costal fold. Tegumen with projecting side processes, as long as the uncus. Upf with 1 to 3 hyaline apical spots. ♂ F 19 mm.

atahuallpai Lindsey 1925: ♂ Peru: figured ♂ and genitalia. Fig Hayward 1948, ♂ and genitalia.
B.M. 1 ♂ Panama. 1 ♂ Colombia. 5 ♂ Peru (Chanchamayo. Chaquimayo. Amazonas). 1 ♂ Bolivia (Santa Cruz). 3 ♂ Minas Geraes. 6 ♂ 1 ♀ S. Brazil (Rio. Paraná). 9 ♂ Paraguay. 5 ♂ Argentine.

6a (4b). Uncus tapered to a point.
6b (10a). Tegumen, seen ventrally, produced at back of uncus into two projecting processes.
6c (8a). ♂ with a costal fold upf.
6 (7). ♂ head brown as usual. Antennal shaft chequered. Upf no apical spots. ♂ F 18 mm.

catharina Bell 1937: ♂ Santa Catharina: genitalia figured. B.M. 1 ♂ "Mexico" (coll Felder). 13 ♂ 14 ♀ S. Brazil (Rio. São Paulo. Novo Friborgo. Espirito Santo. Paraná. Santa Catharina). 1 ♂ Argentine (Entre Rios).

7 (6). ♂ head and palpi, above, brilliant copper: upf no apical spots. ♀ head brown as usual: 3 apical hyaline spots in line: differs from *phylo* in having the ostium bursae bifid. ♂ F 17 mm.

cupreiceps Mabille 1891: ♂ Honduras. Fig Godman & Salvin, ♂ and genitalia: Seitz: Hayward 1948.
B.M. 10 ♂ 4 ♀ Mexico. 2 ♂ Guatemala. 2 ♂ Honduras. 2 ♂ Costa Rica. 3 ♂ Panama. 26 ♂ 1 ♀ Colombia. 3 ♂ Venezuela. 2 ♂ Ecuador (Upper Napo). 19 ♂ Peru (Tarapote–Huancabamba. Amazonas. Carabaya). 6 ♂ Bolivia (Reyes. Buenavista. Santa Cruz). 3 ♂ Amazons (Nauta. St Paulo). 1 ♂ Bahia. 1 ♂ S. Brazil (Rio).

8a (6c). ♂ Upf no costal fold.
8 (9). ♂ upf with 1 to 3 apical hyaline spots. ♂ F 16 mm. The genitalia are like those of *cupreiceps* and in both species the end of the cuiller of the clasp displays considerable variation.

morona. 2 sub-species.
(a). Top of cuiller evenly sloped.
Sub-sp. **lorea** Bell 1947: ♂ Colombia, Amazonas: genitalia figured. Separation doubtful.
B.M. 3 ♂ 1 ♀ Peru (Amazonas. Tarapote).
(b). Top of cuiller humped on dorsal side.
Sub-sp. **morona** Bell 1940: ♂ Peru: genitalia figured.
B.M. 2 ♂ Peru (Carabaya).

9 (8). ♂ ♀ without hyaline spots. Very dark and markings faint. ♂ F 20 mm.

nigerrima Mabille & Boullet 1917: ♂ Peru.
Synonyms. *banosa* Bell 1937: ♂ Ecuador: genitalia figured.
nubecula Hayward 1940: ♂ Ecuador: genitalia figured.
B.M. 4 ♂ Ecuador. 7 ♂ Peru (Chaquimayo. Carabaya). 2 ♂ Bolivia (La Paz. Coroica).

10a (6b). Tegumen not produced at back of uncus.

10b (15a). Tegumen, seen ventrally, produced on either side, well clear of the uncus.
10 (11a). Tegumen processes long and slender, nearly as long as the uncus. Dark with obscure markings: ♂ upf without, ♀ with one, apical spot. ♂ F 18 mm.: with a costal fold.

subapicatus Schaus 1902: ♂ Mexico, Songolica.
Synonym. *chilpancingo* Bell 1937: ♂ Mexico, Chilpancingo: genitalia figured.
B.M. 3 ♂ 1 ♀ Mexico (San Sebastian). 2 ♀ Guatemala.

11a (10). Tegumen projections short.
11b (14). Tegumen no second lower projection.
11c (13). ♂ with costal fold. Antennal shaft chequered.
11 (12). Cuiller of clasp ending in a narrow point. ♂ upf with 1 apical spot, ♀ with 2 and also a spot in space 2. ♂ F 17 mm.

orsines Godman & Salvin 1896: ♂ Mexico: type B.M.: figured, ♂ and genitalia. Fig Seitz.
B.M. 2 ♂ Mexico. 1 ♂ Guatemala. 1 ♂ 1 ♀ Salvador.

12 (11). Cuiller of clasp broad-ended, with a central spine. Paler, with conspicuous dark markings. ♂ upf without, ♀ with 2, hyaline apical spots. ♂ F 16 mm.

evippe Godman & Salvin 1896: ♂ Mexico: type B.M.: figured, ♂ and genitalia. Fig Seitz.
B.M. 2 ♂ 1 ♀ Mexico. 1 ♂ Guatemala.

13 (11c). ♂ no costal fold. Rather pale brown with central, discal and submarginal dark bands: no hyaline spots. Below, with sparse grey scaling, bands absent unf, faint unh. Antennal shaft chequered. Palpi and pectus, below, whitish. ♂ F 15 mm. Behind the aedoeagus, on its ventral side, is a long dense tuft of straight hairs, a very unusual feature.

ziza nov: ♂ Cuernavaca, Mexico, ex coll Felder: type B.M.
B.M. Only the type.

14 (11b). Tegumen with a double projection on either side of the uncus, giving a scalloped appearance. End of cuiller of clasp hemispherical. ♀ upf with 3 well-marked apical spots in a straight row.

phylo. 3 sub-species.
(a). ♂ upf with a costal fold: F 18 mm. Above, pale areas obscure and no hyaline spots. ♀ with the pale and dark areas strongly contrasting: upf often with several hyaline discal spots.
Sub-sp. **pullata** Mabille 1878: ♂ "E. Brazil": type B.M.
Synonyms. *imbras* Godman & Salvin 1896: ♂ Mexico: type B.M.: figured ♂, ♀ and genitalia. Fig Seitz.
sodalis Schaus 1913: ♀ Costa Rica : figured. Fig Seitz.
B.M. 35 ♂ 15 ♀ Mexico. 8 ♂ Guatemala. 3 ♂ 1 ♀ Honduras. 2 ♀ Costa Rica. 2 ♂ 2 ♀ Panama. 4 ♂ 3 ♀ Colombia. 1 ♂ 2 ♀ Venezuela. 1 ♂ type.
(b). ♂ upf no costal fold: F 16 mm. Above, basal area dark up to the pale submarginal band, which is usually conspicuous: upf with 1 to 3 hyaline apical spots.
Sub-sp. **phylo** Mabille 1878: ♂ "E. Brazil": type B.M.
Synonyms. *browni* Hayward 1939: ♂ Ecuador: genitalia figured.
naranjapata Williams & Bell 1940: ♂ Ecuador: genitalia figured.
B.M. 10 ♂ 6 ♀ Ecuador (Balzapamba. Loja. Chimbo. Quevedo). 1 ♂ type.
(c). ♀ unh dorsal half of wing white. F 17 mm.
Sub-sp. **oiclus** Mabille 1889: ♀ Chiriqui: figured.
B.M. 1 ♀ Matto Grosso.

15a (10b). Tegumen, seen ventrally, not produced at sides.
15b (18a). Tegumen, seen ventrally, broader than the uncus and nicked in the middle of each side.
15 (16a). Cuiller of clasp not projecting beyond the valva. ♂ F 15 mm.: with costal fold: termen more rounded than usual. Above, dark silky brown: no hyaline spots, dark markings obscure. Unh chocolate with ochreous scaling forming a bar at end of cell and 2 discal bands, as usual.
antha nov: ♂ Colombia, Cauca Valley: type B.M.
B.M. 2 ♂ type loc.

16a (15). Cuiller of clasp projecting beyond the valva.
16 (17). Cuiller without a projecting lip over the valva. ♂ with a costal fold upf.
brennus. 2 sub-species.

(a). Small, ♂ F 14 mm. ♂ upf without, ♀ with 2 or 3, hyaline apical spots.

Sub-sp. **brennus** Godman & Salvin 1896: ♂ Panama: type B.M.: genitalia figured. Fig Seitz.

B.M. 5 ♂ 1 ♀ Mexico (Vera Cruz. Orizaba. Tabasco). 2 ♂ Guatemala. 4 ♂ 2 ♀ Costa Rica. 4 ♂ Panama.

(b). Large, ♂ F 18 mm. ♂ upf with 1 to 3 apical spots. May be a hybrid with *tetra*.

Sub-sp. **vexta** nov: ♂ Manizales, Colombia: type B.M.

B.M. 2 ♂ Colombia.

17 (16). Cuiller with an inwardly projecting lip.

tetra. 5 sub-species.

(a). ♂ F 15 mm.: with costal fold. ♂ upf without hyaline apical spots: ♀ with 2. Tip of cuiller shouldered at back and twisted.

Sub-sp. **oriza** nov: ♂ Orizaba, Mexico: W. Schaus: April 1896: type B.M.

B.M. 5 ♂ 1 ♀ Orizaba, Mexico.

(b). ♂ F 15 mm.: with costal fold. ♂ ♀ typically with 3 hyaline apical spots. Tip of cuiller sloping, lip compressed near its commencement.

Sub-sp. **guerra** nov: ♂ Omilteme, Guerrero: 8,000 ft: July: H. H. Smith: type B.M.

B.M. 6 ♂ 2 ♀ Guerrero, Mexico.

(c). ♂ 17 mm.; with costal fold. ♂ ♀ with up to 3 apical spots feebly developed and often absent. Cuiller of clasp as in *guerra*, but not compressed.

Sub-sp. **boliviensis** Bell 1937: ♂ Bolivia. Fig as *giselus* by Godman & Salvin, ♂ and genitalia: also by Hayward 1948.

B.M. 6 ♂ 1 ♀ Guatemala. 1 ♀ Nicaragua. 2 ♂ Colombia. 2 ♂ Venezuela. 42 ♂ Peru (Huancabamba. La Merced. Pozuzo. Marcapata. Carabaya. Uruhasi). 39 ♂ 1 ♀ Bolivia (La Paz. Cochabamba. San Jacinto. Tanampaya. Chulamani. Charaplaya).

(d). ♂ F 17 mm.: no costal fold. Inner face of cuiller convex above the lip. Upf outwardly paler: apical spots absent or feeble.

Sub-sp. **tornea** nov: ♂ Torne, Cauca, Colombia: Feb. 1907: Paine & Brinkley: type B.M.

B.M. 7 ♂ Colombia (Cauca).

(e). ♂ F 15 to 17 mm.: no costal fold. Inner face of cuiller not convex above the lip. Upf more uniform: apical spots feebly developed.

Sub-sp. **tetra** Mabille 1878: ♂ "E. French Guiana": type B.M.

Synonyms. *giselus* Mabille 1883: ♀ Bogotá: type B.M. Figs by Godman & Salvin and Hayward 1948 are *boliviensis*.

ancholis Plötz 1884: Colombia.

B.M. 9 ♂ 3 ♀ Colombia (Bogotá. Tolima). 21 ♂ 3 ♀ Ecuador (Loja. Paramba. Zamora. Rio Pastaza. Quito. Ambato).

18a (15b). Tegumen with the outer edges entire.

18 (19). ♂ with costal fold. Above, rufous brown. Below, brown with profuse dull ochreous scaling. Upf 2 hyaline apical spots. ♂ F 15 mm.

saletas Godman & Salvin 1896: ♂ Guatemala: type B.M.: figured, ♂ and genitalia.

B.M. Only the type.

19 (18). ♂ no costal fold. Above and below dark and marked as usual: upf with 1 or 2 hyaline apical spots. Clasp furnished with a large, bulbous-ended style from the valva. ♂ F 15 mm.

eusebius Plötz 1884: Central America.

Synonyms. *subgisela* Strand 1920: ♂ Colombia.

aplica Bell 1937: ♂ Mexico: genitalia figured.

B.M. 2 ♂ Guatemala. 4 ♂ Costa Rica.

20a (1a). Without any grey or ochreous superscaling.

20 (21a). Large, ♀ F 20 mm. Above, dark velvet-brown, with rather paler areas about apex F, end cell and disc F and H. Below, unmarked chocolate-brown. Upf 3 hyaline apical dots in type: only 1 (in space 8) in second specimen. Antennal shaft and palpi below brown.

zora nov: ♀ Ecuador: type B.M.

B.M. 2 ♀ Ecuador (coll Hewitson).

21a (20). ♂ F 15 mm.: with costal fold. Aberrant species leading over to *Staphylus*.

21b (23). Below, abdomen brown, as usual. Termen H slightly wavy.

21 (22). Clasp slender, with a very short slender style. Above, shining dark brown with 1 to 3 apical hyaline dots and sometimes a dot in space 2.

zorilla Plötz 1886: ♂ Panama. Fig Seitz.
Synonyms. *hazelae* Hayward 1940: ♂ Ecuador: genitalia figured.
madrea Williams & Bell 1940: ♂ Peru: genitalia figured.
B.M. 2 ♂ Panama. 2 ♂ Ecuador (Rio Pastaza). ♂ 1 Bolivia (Santa Cruz de la Sierra).

22 (21). Clasp broad-ended; no style. Above, matt brown with obscure dark areas mid wings: upf with 2 well-marked hyaline apical spots. Unh with an obscure dark discal band.

clytius Godman & Salvin 1897: ♂ Mexico: type B.M.: figured ♂ and genitalia. Fig Seitz.
B.M. 6 ♂ Mexico. 1 ♂ Honduras.

23 (21b). Below, abdomen white with a black central line. Above and below, unmarked silky brown, except that on upf the apex is white-tipped and there are a number (none to 11) of minute opaque white dots. Unh sometimes outwardly paler in ♀.

litus Dyar 1912: ♂ Mexico. Fig Seitz.
Synonyms. *holaphegges* Dyar 1913: ♂ Mexico. Fig Seitz.
smodora Dyar 1915: ♂ Mexico. Fig Seitz.
B.M. 6 ♂ 4 ♀ Mexico (Guerrero).

E.32. STAPHYLUS Godman & Salvin 1896: type *mazans* Reakirt: fixed by authors as *ascaphalus* Staudinger, which is a sub-species of *mazans*.
Synonym. *Scantilla* Godman & Salvin 1896: type *vincula* Plötz: fixed by authors as *opites* Godman & Salvin, which is a synonym of *vincula*.

Small dark insects with few markings and quadrate wings, resembling *Bolla*, but the antennal club is shorter, more or less flattened and hollowed, with a nudum of only 10 to 11 segments. ♂ usually with a costal fold upf: hind tibiae with 2 pairs of spurs, no tibial tuft. The ♂ genitalia have usually an undivided uncus, gnathos ill developed: tegumen often expanded: sometimes brushes on either side of the vinculum: clasp broad, with the valva usually as broad as the cuiller.

Markings, such as hyaline apical spots, dark bands, etc., are generally an unreliable guide to identification and a genitalia examination is necessary. It has been found difficult to co-ordinate the genitalia drawings published by various authors and this is sometimes due to distortion in mounting: also the ventral view of the uncus is not usually given, though of great importance for systematic work.

1a (35a). F dorsum straight.
1b (3a). Head and palpi above, brilliant metallic green. Upf with pale and dark bands contrasting and considerable grey scaling. H termen undulate.
1 (2). ♂ with costal fold. Upf no white spots. Unh tornal area more or less whitish. ♂ F 13 mm.
chlorocephala Latreille 1824: ♂ Brazil: type B.M.
B.M. 1 ♂ Minas Geraes. 5 ♂ S. Brazil (São Paulo. Espirito Santo. Corcovado).

2 (1). ♂ without a costal fold. Upf with semi-hyaline white spots, 3 at apex, upper dot in cell, in space 3. Below, chocolate, darker bands faint and diffuse. General appearance of *eryx* and *astra*. ♂ F 11 mm.
chlora nov: ♂ Bolivia; Yungas, La Paz: 1,000 metres: type B.M.
B.M. 1 ♂ Amazons (Tapajos, H. W. Bates). 1 ♂ No loc. 1 ♂ type.

3a (1b). Head not green.
3b (13a). Head and palpi golden. ♂ with costal fold. Palpi and pectus below white or grizzled. Uncus tapered to a point: tegumen not conspicuously expanded.
3 (4a). With conspicuous markings. Above dark brown with narrow paler markings contrasting. Upf with tiny, but conspicuous hyaline spots, 3 at apex, 2 in cell, one in each of spaces 2 and 3, 2 discal and 1 basal in space 1b. Unh with sharply marked central and discal spots of greenish-yellow scales. ♂ F 12 mm.
eryx nov: ♂ Santarem, Amazons: H. H. Smith: type B.M. Described by Plötz 1884 (Journ. Nassau Ver. 37:38) as

"*auricapilla*" Staudinger and a copy of his unpublished plate No. 1057 is in the B.M.
B.M. 20 ♂ 3 ♀ Amazons (Santarem. Tapajos).

4a (3). Markings inconspicuous.
4 (5a). Upf cilia at apex white. Dull dark brown and markings obscure except for 2 opaque white apical spots in spaces 7 and 8. Palpi below white. ♂ F 13 mm.
ceos Edwards 1882: ♂ Arizona. Fig Holland, ♂ type: Godman & Salvin ♂ and genitalia: Lindsey, etc., ♂ genitalia.
B.M. 25 ♂ 6 ♀ Arizona. 1 ♂ California. 3 ♂ 3 ♀ Mexico (Sonora. Durango).

5a (4). Upf cilia at apex not white. Upf with or without apical spots.
5b (10a). Without vinculum brushes.
5c (7a). Seen from inside, the valva overlaps the cuiller.
5 (6). The valva extends across the cuiller nearly to the back of the clasp. ♂ F 13 mm.
putumayo. 2 sub-species.
(a). Valva with an upper arm, curled over the cuiller.
Sub-sp. **putumayo** Bell 1937: ♂ Peru: genitalia figured.
B.M. 1 ♂ Peru (Tarapote). 2 ♂ Bolivia (Santa Cruz).
(b). Upper arm of valva absent.
Sub-sp. **sambo** nov: ♂ Juhuty, Amazons: type B.M.
B.M. Only the type.

6 (5). The valva only slightly overlaps the cuiller.
vulgata. 2 sub-species.
(a). ♂ F 13 mm. Uncus normal, gradually tapering. The form of the valva varies a great deal: it may be narrow and as long as the cuiller or short, broad, quadrate: a short, pointed antistyle may be present.
Sub-sp. **vulgata** Möschler 1878: ♂ Colombia. Fig as *aurocapilla* by Godman & Salvin, ♂ and genitalia: Seitz: Williams & Bell 1940, genitalia: Hayward 1948, genitalia.
Synonyms. ? *ochroceps* Hayward 1933: ♂ Argentine: ♂ and genitalia figured. Fig Hayward 1948, genitalia.
? *toba* Hayward 1947: ♂ Paraguay: genitalia figured.
B.M. 23 ♂ Mexico. 2 ♂ Guatemala. 2 ♂ Honduras. 1 ♂ 2 ♀ Costa Rica. 8 ♂ Panama. 11 ♂ 1 ♀ Colombia. 2 ♂

Venezuela. 1 ♂ Peru (La Merced). 1 ♂ Bahia. 1 ♂ 1 ♀ S. Brazil (Espirito Santo). 1 ♂ Argentine (Tucuman).

(b). ♂ F 12 mm. Uncus compressed, seen ventrally it is short and very broad, ending in a short, pointed tip. Usually without apical spots upf.

Sub-sp. **sinepunctis** Kaye 1904: Trinidad. Genitalia fig by Williams & Bell 1940.

B.M. 1 ♂ Venezuela (Margarita). 4 ♂ 3 ♀ Trinidad.

7a (5c). The valva not overlapping the cuiller.

7 (8a). The valva and cuiller of equal size and height, not overlapping one another. ♂ F 13 mm.

melaina Hayward 1947: ♂ Argentine, Misiones: genitalia figured. Fig Hayward 1948, ♂ and genitalia.

B.M. 3 ♂ Bolivia (Santa Cruz.)

8a (7). Cuiller longer than valva and produced over it.

8 (9). End of cuiller, where bent over valva, broad and rounded. Dense hair tuft at base of cuiller. ♂ F 13 mm.

buena Williams & Bell 1940: ♂ Bolivia: genitalia figured.

B.M. 5 ♂ Bolivia (San José. Santa Cruz. Coroico). 1 ♂ Amazons (Obidos). 2 ♂ Matto Grosso. 1 ♀ S. Brazil (Rio Grande). 4 ♂ Paraguay. 7 ♂ 3 ♀ Argentine (Tucuman. Santa Fé. Salta).

9 (8). End of cuiller turned in and pointed, well above the valva. ♂ F 13 mm.

incanus Bell 1932: ♂ São Paulo: genitalia figured.

B.M. None. Identity uncertain.

10a (5b). With vinculum brushes between the aedoeagus and the uncus.

10 (11a). Inner end of cuiller sharply pointed. Termen undulate: cilia in space 1b on F, white. Upf usually with 2 apical dots. ♂ F 13 mm.

aurocapilla Staudinger 1876: ♂ Buenos Ayres. Fig Seitz. Figures by Godman & Salvin, Williams & Bell and Hayward are of *vulgata*.

Synonym. *similis* Bell 1932: ♂ Brazil: genitalia figured.

B.M. 1 ♂ "Colombia". 2 ♂ Brazil (Santa Catharina). 1 ♂ Uruguay. 10 ♂ 2 ♀ Argentine (Cordoba. Buenos Ayres. Entre Rios.)

11a (10). Inner end of cuiller rounded.

11 (12). Valva very much narrower than the cuiller. Termen even. Above, brown with scarcely visible markings, but there are usually on upf minute white hyaline dots, 3 apical, 2 in cell, discal in spaces 1b, 2 and 3. ♂ F 15 mm.

imperspicua Hayward 1940: ♂ Ecuador: genitalia figured. B.M. ♂ 1 Mexico. 12 ♂ 1 ♀ Colombia. 3 ♂ 2 ♀ Venezuela.

12 (11). Valva as wide as cuiller and its lower, inner end with a sharp point (antistyle). ♂ above, usually unmarked except for a pale submarginal band. ♀ upf with 3 apical and 2 discal spots. ♂ F 13 mm.

caribbea Williams & Bell 1940: ♂ Panama: genitalia figured. B.M. 1 ♂ Costa Rica. 8 ♂ 2 ♀ Panama. 5 ♂ 1 ♀ Colombia. 2 ♂ 1 ♀ Venezuela. 2 ♂ 1 ♀ Ecuador (Chimbo. Quito).

13a (3b). Head and palpi above, brown with a few olive hairs.

13b (28a). ♂ upf with a costal fold.

13c (20a). Uncus end of genitalia normal, tapering to a point and tegumen not expanded.

13d (16a). With vinculum brushes.

13 (14a). Inside of cuiller not produced: very like *caribbea*, but end of cuiller not rounded.

lizeri. 2 sub-species.

(a). ♂ F 13 mm. Inner edge of valva serrate and without a lower spine. ♂ above, with contrasting dark and pale bands and usually with 3 apical and 2 discal hyaline dots.

Sub-sp. **lizeri** Hayward 1938: ♂ Bolivia: genitalia figured. Synonym. *cruza* Williams & Bell 1940: ♂ Bolivia: genitalia figured.

B.M. 11 ♂ 8 ♀ Peru (Chanchamayo. Marcapata. Rio Maranon. Carabaya. Moyabamba. Callao. Chaquimayo). 3 ♂ 2 ♀ Bolivia (Yungas, La Paz. Reyes. Cochabamba. Santa Cruz). 1 ♂ 2 ♀ Amazons (Iquitos. Pebas).

(b). ♂ F 12 mm. Darker. Lower edge of valva with a single long spine, flanked by short spines.

Sub-sp. **corumba** Williams & Bell 1940: ♂ Corumba: genitalia figured.

B.M. 2 ♂ Pará. 3 ♂ Bahia.

14a (13). Inside of cuiller produced. ♂ F 13 mm.

14 (15). Produced part of cuiller broad and overlaps the valva. Termen of wings undulate. Upf generally with 2 apical spots and a spot in space 2: in ♀ also in spaces 1b and 3. ♀ unh tornal third whitened.

ascalon Staudinger 1876: ♂ Novo Friborgo. Fig Hayward 1948: ♂ and genitalia.

Synonyms. *anginus* Schaus 1902: Brazil. Fig Seitz. *dissimilis* Hayward 1936: ♀ Argentine. Fig Hayward 1948.

B.M. 8 ♂ 6 ♀ Brazil (Rio. São Paulo. Novo Friborgo. Petropolis).

15 (14). Produced part of cuiller sharply pointed and extends over the valva. Above, dark bands more prominent: upf 2 apical and 1 discal spot, often absent in ♂: in ♀ also dots in spaces 1b and 3.

epicaste. 3 sub-species.

(a). ♀ unf dorsum white. Large, F 16 mm. and more spotted upf than usual, additional spots in spaces 1b and 4. Upf apex white tipped. Unh dorsal half up to cell and vein 5 white and a white bar at end of cell.

Sub-sp. **stanga** nov: ♀ Ecuador, Paramba: 3,500 ft.: March 1897: W. F. H. Rosenberg: type B.M.

B.M. Only the type.

(b). Unh brown, but sometimes dorsally whitish.

Sub-sp. **epicaste** Mabille 1878: E. Brazil.

Synonyms. *punctiseparatus* Hayward 1933: ♀ Argentine: figured. Fig Hayward 1948.

? *rileyi* Hayward 1936: ♂ Misiones, Argentine: fig of genitalia. Fig Hayward 1948, ♂ and genitalia.

B.M. 1 ♂ Colombia. 1 ♂ Bolivia (Santiago de Chiquitos). 1 ♀ Pará. 1 ♀ Pernambuco. 1 ♂ 1 ♀ Ceara. 1 ♂ Maranham. 1 ♂ 2 ♀ Bahia. 2 ♂ 1 ♀ Matto Grosso (Pena Branca). 2 ♀ Paraná. 11 ♂ Paraguay. 3 ♂ 2 ♀ Argentine.

(c). Unh dorsal third white.

Sub-sp. **melangon** Mabille 1883: ♀ S. America: type B.M.

B.M. 1 ♂ Goyaz. 2 ♂ Minas Geraes. 4 ♂ 2 ♀ Matto Grosso (Chapada).

16a (13d). Without vinculum brushes.

16b (18a). Cuiller broad, extending across the clasp.
16 (17). Cuiller rectangular with an inwardly produced pointed tip, of same length as valva: near the base of the cuiller there is a conspicuous spine overlying the valva. Upf without apical spots, a conspicuous pale brown area about end of cell and the submarginal pale band ending in a detached spot in space 1b. Uph with well-marked, narrow, pale markings. Below, palpi and pectus brown. ♀ unh tornally with whitish scaling. ♂ F 13 mm.

menuda Weeks 1902: ♂ Cochabamba, Bolivia. Fig Weeks 1906.
B.M. 7 ♂ Bolivia (Cochabamba). 1 ♂ Santarem. 1 ♂ 1 ♀ Rio.

17 (16). Cuiller broadly triangular, much longer than the valva. Wing shape of *azteca*. Uniform dark brown: upf with 2 well-marked apical spots in spaces 7 and 8 directed to mid termen: paler brown beyond cells and with a faint dark submarginal band. Below, paler, russet brown: unh with a sub-basal and discal dark band: palpi white, pectus whitish. ♂ F 13 mm.

shola nov: ♂ No loc, ex coll Druce, ex coll Kaden: type B.M.
B.M. Only the type.

18a (16b). Cuiller narrow, not extending across the clasp.
18 (19). Upf with hyaline apical spots, 3 apical and 2 discal: 2 dark bands. Uph with central and discal pale brown spots. ♂ F 14 mm.

tepeca Bell 1942: ♂ Mexico: genitalia figured.
B.M. None.

19 (18). Upf without hyaline spots (rarely 2 apical spots): dark with dark bands. Genitalia abnormal in respect of the clasp, as shown in the figure, and the cuiller has a hair tuft at its base. Below, palpi and pectus white. Small, ♂ F 10 mm.

perna nov: ♂ Pernambuco: A. Miles Moss: type B.M.
B.M. 10 ♂ 1 ♀ Pernambuco. 3 ♂ S. Brazil (Rio).

20a (13c). Uncus end abnormal as indicated below.
20 (21a). Back of tegumen greatly expanded, so that the

uncus is situated mid-way between the back of the tegumen and the aedoeagus. H termen undulate. Palpi below white or grey, ♀ above brown with dark brown central, discal and submarginal bands: upf with hyaline dots in spaces 6 and 7 (usually present in ♂) and often in cell and spaces 3 and 8. ♂ much darker. ♂ F 13 mm.

mazans. 4 sub-species.

(a). Clasp with a very long projecting curved spine from near end of valva: tip of uncus expanded to a tiny triangle: no vinculum brushes. Paler than other sub-species and dark bands more apparent.

Sub-sp. **hayhursti** Edwards 1870: ♂ Missouri. Fig Holland: genitalia fig by Godman & Salvin and by Lindsey, etc., 1931.

B.M. 1 ♂ 4 ♀ "Canada". 20 ♂ 23 ♀ U.S.A. (Kentucky. Illinois. Montana. Georgia. Louisiana. Tennessee. Kansas. California. Florida. Texas. Iowa). 1 ♂ Br Honduras (Belize).

(b). Clasp with no projection from the valva: cuiller broad with dense bristles near the apex and 2 long lower bristles: tip of uncus bulbous: conspicuous vinculum brushes. ♂ darker and larger, ♂ F 14 mm.

Sub-sp. **tierra** nov: ♂ Tierra Colorado, Guerrero, Mexico: 2,000 ft.: H. H. Smith: type B.M.

B.M. 10 ♂ 4 ♀ Guerrero (type loc. Rincon. La Venta. Rio Papagallo). 1 ♂ 2 ♀ Jalisco. 3 ♀ Sonora. Tepic. Mazatlan.

(c). Clasp like *tierra*, but narrower and without the long lower bristles: tip of uncus pointed: no vinculum brushes. Normal size, ♂ F 13 mm.

Sub-sp. **mazans** Reakirt 1866: near Vera Cruz, Mexico. Fig Seitz (badly): Godman & Salvin as *ascaphalus*, ♂, ♀, genitalia: genitalia as *mazans* by Lindsey, etc., 1931 and Hayward 1948.

B.M. 33 ♂ 18 ♀, Vera Cruz, Mexico.

(d). Clasp with a broad triangular projection from the valva: at Tabasco, Mexico, the projection is narrow and the cuiller bristles are restricted to the apex: in Yucatan the cuiller bristles extend over the valva, which is broader: in Bolivia the valva projection is still larger, while the lower bristles are longer and more conspicuous. ♂ as *mazans*.

Sub-sp. **ascaphalus** Staudinger 1876: ♂ Panama. Figs by Godman & Salvin are of *mazans*.

Synonym. *perforata* Möschler 1878: ♂ Colombia.

plummertini Weeks 1906: Venezuela. Fig Weeks 1911.

B.M. 15 ♂ 3 ♀ Mexico (Tabasco, Yucatan). 27 ♂ 5 ♀ Guatemala. 17 ♂ 6 ♀ Honduras. 4 ♂ 2 ♀ Nicaragua. 2 ♂ Salvador. 18 ♂ 9 ♀ Costa Rica. 9 ♂ 1 ♀ Panama. 13 ♂ 1 ♀ Colombia. 13 ♂ 11 ♀ Venezuela. 32 ♂ 7 ♀ Trinidad. 1 ♂ 1 ♀ Peru (Chanchamayo. Callao). 3 ♂ E. Bolivia. 1 ♂ Minas Geraes.

21a (20). Back of tegumen not expanded: no vinculum brushes.

21 (22a). Uncus divided at tip. ♂ upf no apical spots. Termen even. ♂ F 14 mm.

azteca. 2 sub-species.

(a). End of valva excavate. ♂ above, dark bands conspicuous.

Sub-sp. **azteca** Scudder 1872: Tehuantepec. Fig Seitz: Godman & Salvin, ♂ and ♀.

Synonyms. *unifascia* Mabille 1889: ♂ Honduras. Fig Godman & Salvin and Seitz.

machucha Schaus 1913: ♂ Costa Rica: type B.M. (dissected). Fig Seitz.

inconstans Bell 1932: ♂ Costa Rica: genitalia figured.

B.M. 10 ♂ 18 ♀ Mexico. 2 ♀ Guatemala. 1 ♂ Salvador. 2 ♂ Costa Rica.

(b). Much darker. End of valva rounded.

Sub-sp. **tyro** Mabille 1878: ♂ Venezuela: type B.M.

B.M. 2 ♂ Colombia. 26 ♂ 8 ♀ Venezuela. 1 ♂ Brazil (Rio).

22a (21). End of uncus undivided. ♂ F 13 mm.

22b (24a). End of uncus bulbous.

22 (23). Valva of clasp as broad as the cuiller. Below, palpi and pectus white. Above, plain dull brown, generally unmarked, but in fresh specimens the cilia at the apex F are white. ♀ usually with 2 apical spots upf.

musculus Burmeister 1875: Buenos Ayres.

Synonyms. *tucumanus* Plötz 1884: Cordova. Copy of Plötz's unpublished plate in B.M. Fig Hayward 1948, ♂ and genitalia.
cordovanus Draudt 1923: Cordova: figured.
fascia Hayward 1933: ♂ Argentine: figured, ♂ and genitalia.
B.M. 2 ♂ 1 ♀ Paraguay. 14 ♂ 8 ♀ Argentine.

23 (22). Valva insignificant: but from its base, on the ventral side there is a long, curved, projecting spine, a unique feature. Below, palpi and pectus brown. Above, head and palpi tend to be yellow scaled in some specimens. Antennae below whiter than usual. ♀ like *mazans*.

huigra. 2 sub-species.
(a). ♂ above, plain silky dark brown, paler outwardly at costa and termen. ♂ F 14 mm.
Sub-sp. **huigra** Williams & Bell 1940: ♂ Ecuador: genitalia figured.
Synonym. ? *cartagoa* Williams & Bell 1940: ♂ Costa Rica: genitalia figured.
B.M. 15 ♂ 3 ♀ Ecuador (Loja. Balzapamba. Guayaquil. Huigra. Chimbo. Zamora). 1 ♂ Peru. 1 ♂ Bolivia (Coroico).
(b). ♂ above, brown with dark bands conspicuous as in *mazans hayhursti*: the submarginal band is macular.
Sub-sp. **canka** nov: ♂ Callao, Peru: Oct 1883, J. J. Walker: type B.M.
B.M. 4 ♂ type loc.

24a (22b). End of uncus pointed. Tegumen expanded at sides, seen ventrally. Upf no hyaline spots.
24b (26a). Tegumen expansion consists of pointed processes parallel to the uncus.
24 (25). Unh with conspicuous central and discal dark spots, elsewhere grey scaled. Cilia F and H conspicuously chequered. Termen not undulate. Upf dark brown with grey scaling forming 3 apical and 3 discal (in spaces 1b, 2, 3) spots, as well as a submarginal series. Uph with vague central and discal pale bands. ♂ F 12 mm.

mossi nov: ♂ Peru: A. Miles Moss: type B.M.
B.M. 3 ♂ 2 ♀ Peru.

25 (24). Unh with a discal row of small, sharply marked whitish spots and a spot in cell. Upf with a broad, irregular, central dark band, followed by a broad pale band, inside the outer edge of which there is a series of dark spots. Termen even. Apex more pointed than usual and the termen slightly concave. ♂ F 15 mm.

cordillerae Lindsey 1925: ♂ Peru: figured ♂ and genitalia: co-type in B.M.
B.M. 1 ♂ Ecuador. 5 ♂ 3 ♀ Peru (Cajabamba. Matucana. Tingua, Yungas. Amazonas, Chachapoyas).

26a (24b). Tegumen expansion at right angles to uncus, tips of processes blunt.
26 (27). Brown: termen undulate. Unh with 2 rows of diffuse grey spots. Cilia more or less chequered. Above with obscure dark macular bands. ♂ F 14 mm.

coecatus Mabille 1891: ♂ Brazil, Novo Friborgo.
Synonym. *tadus* Schaus 1902: ♂ Novo Friborgo: cotype B.M.
B.M. 8 ♂ 4 ♀ (Novo Friborgo. Theresopolis. Castro, Paraná).

27 (26). Black with obscure dark bands. Termen even. ♂ F 14 mm.

balsa Bell 1937: ♂ Peru: genitalia figured.
B.M. 1 ♂ Ecuador. 1 ♂ Peru (Iquitos, Rio Cachiacu).

28a (13b). ♂ without a costal fold.
28 (29a). Above with a broad dark postdiscal band flanked on either side by a broad pale band: upf ♀ with 3 hyaline apical spots, usually absent in ♂. Below, palpi and pectus white. Valva feebly developed: aedoeagus spatulate and spined. ♂ F 13 mm.

vincula Plötz 1886: Panama.
Synonym. *opites* Godman & Salvin 1896: ♂ Panama: type B.M.: fig ♂ and genitalia. Fig Seitz.
B.M. 1 ♂ Mexico. 9 ♂ 2 ♀ Guatemala. 3 ♀ Costa Rica. 2 ♀ Venezuela.

29a (28). Not so marked.
29b (32a). Upf with at least a hyaline apical spot in space 8: there may be 3 apical spots and one in space 3.

29c (31). Seen from inside the valva overlaps the cuiller.
29 (30). Inner face of valva smooth. Below, palpi and pectus dark brown. Termen H undulate. ♂ F 15 mm.
oeta Plötz 1884: Brazil: copy of unpublished plate in B.M.
Synonyms. *scoramus* Schaus 1902: Pará: ♂ co-type in B.M.
vulgaris Hayward 1933: ♂ Argentine: genitalia figured. Fig Hayward 1948, ♂ and genitalia.
B.M. 1 ♂ Panama. 10 ♂ 3 ♀ Peru (Huancabamba, Marcapata. Uruhasi. Carabaya). 8 ♂ 2 ♀ Bolivia (Chulumani. Yungas. Cochabamba. Sara, Santa Cruz). 2 ♂ Argentine (Tucuman).

30 (29). Inner face of valva toothed. Below, palpi and pectus whitish. ♂ F 13 mm.
saxos 2 sub-species.
(a) Termen not undulate. Valva quadrate.
Sub-sp. **saxos** nov: ♂ Cali, Colombia: Sept–Nov 1894, W. F. H. Rosenberg: type B.M.
B.M. Only the type.
(b). Termen undulate. Valva narrow.
Sub-sp. **satrap** nov: ♂ San José, Bolivia: type B.M.
B.M. 4 ♂ Bolivia (Santa Cruz. San José).

31 (29c). Seen from inside, the cuiller overlaps the valva. ♂ F 13 mm. Black; outer half uph with whitish scaling leaving an indistinct band in middle: upf 2 apical hyaline spots and a spot in cell. Unh dorsal half tinged grey.
semitincta Dyar 1924: ♂ Colima, Mexico.
Synonym. ? *iguala* Williams & Bell 1940: ♂ Iguala, Mexico: genitalia figured.
B.M. None.

32a (29b). Upf without hyaline spots.
32 (33a). Upf with small bluish-white opaque spots, 3 at apex, 2 in cell, one each in spaces 2 and 3: pale and dark markings strongly contrasting, as in *eryx*. Termen slightly undulate. ♂ F 12½ mm.
astra Williams & Bell 1940: ♂ Peru: genitalia figured.
B.M. 2 ♂ Peru (Amazonas, Cavalla Cocha). 1 ♀ S.E. Peru (Chaquimayo). 1 ♀ Bolivia (Santa Cruz).

33a (32). Upf without bluish-white spots.
33 (34). Above, with yellow scaling, no dark bands or spots. Termen H rounded. Below, unmarked, dorsum unf broadly yellowish-white, except at tornus. ♂ F 14 mm.
inornata Bell 1937: ♂ Ecuador: genitalia figured.
B.M. None.

34 (33). Above, without yellow scaling. Small ♂ F 10 mm.
minor 2 sub-species.
(a). Termen not undulate. Dark with faint markings.
Sub-sp. **manx** nov: ♂ Cauca, Colombia: type B.M.
B.M. 2 ♂ 3 ♀ type loc.
(b). Termen very undulate F and H: cilia whitish, where termen is excavate. Above, with conspicuous grey scaling, forming blotchy grey spots in space 1b and about end of cell. Unh often the tornal third is whitened.
Sub-sp. **minor** Schaus 1902: ♂ Peru: co-type B.M. Fig Lindsey 1925: Hayward 1948, ♂ and genitalia.
Synonym. *fungoides* Hayward 1933: ♂ Argentine: clasp of genitalia figured.
B.M. 4 ♂ Peru (Chanchamayo. Loreto). 5 ♂ 1 ♀ Bolivia (Yungas. San José). 1 ♂ Amazons (Iquitos). 3 ♂ Minas Geraes. 1 ♂ Goyaz. 2 ♂ São Paulo. 5 ♂ 1 ♀ Paraguay. 2 ♂ Argentine.

35a (1a). F dorsum concave. ♂ upf with a costal fold.
35b (37). Upf with hyaline spots. ♀ usually variegated with ochreous bands and spots, above.
35 (36). ♂ upf 2 apical hyaline apical spots in spaces 7 and 8, latter larger: ♀ may have a dot in space 6 also, out of line with the upper 2 spots, also a cell spot and 1 or more discal spots. ♂ F 13 mm. Termen H excavate.
incisus Mabille 1878: ♂ Brazil: type B.M. Fig in Seitz is of *excisus*.
Synonyms. *variegatus* Mabille 1878: ♀ Brazil: type B.M. Fig Hayward 1933, ♀: 1948, ♂ and genitalia.
aterea Plötz 1884: ♂ Rio.
dentivittata Hayward 1933: ♂ Argentine: figured.
? *ordinarius* Hayward 1933: ♂ Argentine: figured. Fig Hayward 1948, ♂ genitalia.

B.M. 1 ♀ Colombia. 3 ♂ 2 ♀ Minas Geraes. 27 ♂ 19 ♀ S. Brazil (São Paulo. Paraná. Rio. Espirito Santo. Petropolis). 2 ♂ Paraguay. 1 ♂ Uruguay. 3 ♀ Argentine.

36 (35). ♂ upf 3 apical hyaline spots and a spot in the cell: ♀ with 3 apical spots in line, 2 in the cell, one each in spaces 2 and 3. ♂ F 13 mm.
fasciatus Hayward 1933: ♂ Argentine: figured, ♂ and genitalia.
Synonym. *angulata* Bell 1937: ♂ Brazil: figured.
B.M. 1 ♂ 1 ♀ Argentine.

37 (35b). Upf no hyaline spots: conspicuous alternating pale and dark brown bands. Dorsum H longer than usual. ♂ F 14 mm.
evemerus Godman & Salvin 1896: ♂ Costa Rica: type B.M.: figured, ♂ and genitalia. Fig Seitz.
B.M. 13 ♂ 3 ♀ Costa Rica. 2 ♂ 1 ♀ Panama.

E.33. PLUMBAGO Evans (p. 12 ante): type *plumbago* Plötz: fixed by author.

A genus of 3 species resembling *Staphylus* in respect of antennae, wing shape and appearance, but with the genitalia and secondary sexual characters nearer to *Paches*.

Antennae = $\frac{1}{2}$ costa: apiculus obtuse from thickest part of club: nudum 11 to 12. Palpi short. Typically with the upper pair of spurs absent on the hind tibiae. ♂ F no costal fold: hind tibiae with a hair tuft entering a thoracic pouch.

1 (2a). Antennal shaft plain. Hind tibiae without the upper pair of spurs. Costa F highly convex. Above, dark brown: head, thorax, bases and termen of both wings overlaid with yellow scales, leaving a broad dark central area upf and a tornal dark spot: the dark central area upf is divided into 2 bands by a sparse overlay of silvery-blue scales, which extend to the basal part of the dark area on uph. ♂ unh brown with a faint dark band: in a side light both wings are copper-coloured. ♀ unh with dull grey scaling leaving dark bands. ♂ F 12 mm.
plumbago Plötz 1884: ♀ ? loc. Fig Seitz (very badly).

Synonym. *chalybs* Mabille 1888: Chanchamayo: figured.
B.M. 2 ♀ Fr Guiana. 3 ♂ 4 ♀ Up Amazons (Ega. R. Madeira).

2a (1). Antennal shaft chequered brown and white. Above, sparsely overlaid with grey scales, leaving central, discal, and marginal dark markings. Unf brown with slight grey scalings.
2 (3). Hind tibiae without the upper pair of spurs. Costa F highly arched. Above, dark markings broken into spots. Unh uniformly overlaid with grey scales, leaving dark bands. ♂ F 14 mm.

pulverea Mabille 1878: ♀ Fr Guiana: type B.M.
Synonym. *protius* Plötz 1884: ♂ Brazil. Fig Seitz (badly).
B.M. 1 ♀ "Fr Guiana". 5 ♂ S. Brazil (Rio. Corcovado).

3 (2). Hind tibiae with 2 pairs of spurs. Costa F nearly straight. Above, dark markings in regular bands. ♂ unh outwardly rather paler, dark discal band present (from Plötz's fig). ♀ unh more or less densely white scaled on the tornal half, dark band absent. ♂ F 11 mm.

serapion Plötz 1884: ♂ Brazil, Novo Friborgo: copy in B.M. of Plötz's unpublished plate. Fig Seitz (badly).
B.M. 2 ♀ S. Brazil (Paraná).

E.34. TRINA Evans (p. 12 ante): type *geometrina* Felder: fixed by author.

Antennae = ½ costa: shaft chequered: club obtuse from beginning of nudum of 9 segments: apiculus = ½ unbent part of club. Palpi short, slender, hairy. F costa very short, strongly convex: termen even, convex: dorsum more or less concave. H termen even, slightly angled at end of vein 4: costa = dorsum. ♂ no costal fold: hind tibiae with a long, thin hair tuft, fitting into long, slender thoracic pouches. Uncus slender, deeply divided: clasp with a long style, as in *Antigonus*.

Single species. Above, pale brown with white-edged, dark bands: no hyaline spots: large subtornal dark spot upf.

geometrina. 2 sub-species.
(a). ♂ F 13 mm. Varies from a dark form, with faint

markings and a straight dorsum F, to a pale, bright form with a concave dorsum F, white and tawny patches unf and white lines unh.

Sub-sp. **geometrina** Felder 1867: ♂ (dark form) Venezuela: type B.M.: figured. Fig Seitz: Hayward 1948, ♂ and genitalia.

Synonyms. *hadina* Butler 1870: Brazil (dark form): type seems lost.

odina Butler 1870: ♂ Venezuela: type B.M. (pale form).

corbinianus Capronnier 1874: ♂ Rio.

aerope (Prittwitz MS) Plötz 1884.

B.M. 1 ♂ "Panama". 7 ♂ 4 ♀ Venezuela. 1 ♂ 1 ♀ Surinam. 3 ♂ 2 ♀ Peru (Cuzco. Tarapote. Moyabamba). 24 ♂ 1 ♀ Bolivia (San José. Bueyes. La Paz. Santa Cruz). 4 ♂ 2 ♀ "Lower Amazons". 2 ♂ Ceara. 6 ♂ 1 ♀ Bahia. 9 ♂ 5 ♀ Minas Geraes. 7 ♂ Matto Grosso. 2 ♂ 1 ♀ Goyaz. 27 ♂ 15 ♀ S. Brazil. 1 ♂ Uruguay. 16 ♂ 5 ♀ Paraguay. 10 ♂ 1 ♀ Argentine.

(b). ♂ F 16 mm. Like the pale bright form of *geometrina* but unh the tornal half is whitened and the clasp of the genitalia is crested.

Sub-sp. **phalaena** Mabille 1897: ♂ Tanampaya, Bolivia: type B.M.

B.M. 18 ♂ Bolivia (Cochabamba. Chariplaya. Tanampaya).

E.35. DIAEUS Godman & Salvin 1895: type *lacaena* Hewitson: fixed by Lindsey 1925.

Like *Onenses*; there are hyaline spots on both wings and the wing shape is much the same, but the apex F and tornus H are not produced. Antennae = ½ wing: shaft chequered: apiculus < club, obtuse, nudum 12. Palpi second segment long. ♂ no costal fold: hind tibiae with a tuft entering a thoracic pouch. Uncus undivided.

Single species. ♂ F 13–16 mm.

lacaena. 4 sub-species.

(a). Upf central third white and central hyaline spot (cell to costa) broad, quadrate. Uph apical three-quarters more or less white due to obsolescence of central markings above vein 2. ♂ F 13½ mm.

Sub-sp. **varna** nov: ♂ Atoyac, Vera Cruz: May: H. H. Smith: type B.M. Fig Seitz and genitalia by Godman & Salvin, as *lacaena*.
B.M. 4 ♂ 1 ♀ Mexico. 16 ♂ Costa Rica. 21 ♂ 4 ♀ Panama.
(b). Upf central pale area shaded: hyaline cell spot outwardly excavate. Uph the marking mid cell continued to costa. ♂ F 14 mm.

Sub-sp. **lacaena** Hewitson 1871: ♂ Brazil: figured: type B.M. Figs by Seitz and Godman & Salvin are of *varna*.
B.M. 5 ♂ Venezuela. 3 ♂ Peru (Amazonas). 3 ♂ 1 ♀ Minas Geraes. 15 ♂ 3 ♀ Novo Friborgo. 7 ♂ Rio.
(c). Similar to *lacaena*, but larger, ♂ F 16 mm. Upf with a conspicuous elongate white spot mid space 1b. Uph much darker except at apex: hyaline cell spots and those in spaces 2 and 3 smaller and very conspicuous.

Sub-sp. **ambata** nov: ♂ Ambato, Ecuador: type B.M.
B.M. 12 ♂ 1 ♀ Ecuador (Ambato. Rio Pastaza).
(d). Above, white areas absent, markings smaller: upf cell spot often divided into two. Unh dark markings much more conspicuous and usually with a dark spot on termen at end of vein 1b. ♂ F 14 mm.

Sub-sp. **variegata** Plötz 1884: "Rio". Fig Seitz, but Plötz's original figure is much darker.
Synonyms. *lacaenina* Mabille 1904: ? loc. Fig Seitz.
australis Hayward 1946: ♂ Bolivia. Fig Hayward 1948, ♂ and genitalia.
B.M. 22 ♂ 1 ♀ Peru (Chanchamayo. Huancabamba. Pozuzo. Tarapote. Cuzco. Marcapata. Chaquimayo. San Remon). 32 ♂ Bolivia (San José. Cochabamba. Yungas, La Paz. Coroico. Santa Cruz). 4 ♂ Goyaz. 4 ♂ Matto Grosso. 1 ♂ Espirito Santo. 1 ♂ N. Argentine (Sierra da Aconquija, 2,500 ft.).

E.36. GORGYTHION Godman & Salvin 1896: type *begga* Prittwitz: fixed by Lindsey 1925 as *pyralina* Möschler, which is a sub-species of *begga*.

Examination has revealed that there are two principal species flying together from Mexico to the Argentine. They both have a similar complex pattern, which varies geographically in much the same way. The male genitalia are also very similar, the only differentiating feature being the end of the cuiller in the left clasp. The genitalia are very peculiar: the uncus, as well as the clasps, is asymmetric and the simpler right clasp is conjoined to the uncus as well as to the vinculum: the left clasp is furnished with two intermingling brushes in the lower part of the valva.

1 (2a). F apex produced and termen in ♂ straight from tornus to vein 5: the 2 hyaline apical dots directed to between the tornus and mid termen. Above with a more or less well-developed violet flush. ♂ F 13–15 mm.

begga. 3 sub-species.

(a). Above, markings conspicuous. Unh typically brown, but in some areas there are often indications of white colouring about the tornal half of the termen: typically there are 3 narrow dark bands, but frequently (*marginata*) the outer two bands are united, causing the outer half of the wing to be uniformly dark.

Sub-sp. **pyralina** Möschler 1876: ♂ Surinam: figured. Fig by Godman & Salvin pl 88/20, 21, 22 are of typical *pyralina*: fig 23, as *begga*, is of a ♂ from Panama with more white unh than usual, but generally Panama specimens are referable to *pyralina* rather than to *begga*. Fig Seitz. Figs by Hayward 1933 are of *beggina*.

Synonym. *marginata* Schaus 1902: Peru.

B.M. 4 ♂ Mexico. 11 ♂ 2 ♀ Guatemala. 3 ♂ Honduras. 2 ♂ 3 ♀ Nicaragua. 8 ♂ 2 ♀ Costa Rica. 14 ♂ 2 ♀ Panama. 7 ♂ Colombia. 5 ♂ 2 ♀ Venezuela. 7 ♂ 2 ♀ Trinidad. 2 ♂ Surinam. 7 ♂ 10 ♀ Br Guiana. 8 ♂ 5 ♀ Fr Guiana. 19 ♂ 7 ♀ Lower Amazons. 3 ♂ 2 ♀ Upper Amazons. 11 ♂ 1 ♀ Peru. 9 ♂ 2 ♀ Bolivia. 9 ♂ 1 ♀ No locality.

(b). Similar, but unh the tornal quarter of the wing is white, more or less brown spotted.

Sub-sp. **begga** Prittwitz 1886: no loc. Fig Seitz: his fig of *beggina* might apply to *begga*. Fig Hayward 1933.

Synonym. *tucumana* Burmeister 1878: Argentine.

B.M. 25 ♂ 3 ♀ W. Colombia (Cauca). 9 ♂ 2 ♀ Venezuela. 1 ♀ "Fr Guiana". 6 ♂ 2 ♀ Ecuador. 1 ♂ "Peru". 10 ♂ 5 ♀ Bolivia. 1 ♂ Maranhao. 3 ♂ 1 ♀ Ceara. 1 ♂ 1 ♀ Minas

Geraes. 8 ♂ Matto Grosso. 13 ♂ São Paulo. 1 ♀ Petropolis. 3 ♂ 3 ♀ Novo Friborgo. 2 ♂ Santa Catharina. 4 ♂ 1 ♀ Espirito Santo. 2 ♂ Paraná. 16 ♂ 6 ♀ Rio. 4 ♂ 1 ♀ "Brazil". 1 ♂ Uruguay. 12 ♂ 1 ♀ Paraguay. 3 ♂ 1 ♀ Argentine.

(c). Apex F more produced. Above, unmarked velvet black, except for 2 or 3 dark spots upf on a rather paler ground near the base. Unh with a more or less developed white tornal area, never so wide as in *begga*. Superficially looks very different, but may be no more than an extreme variety of *pyralina*.

Sub-sp. **plautia** Möschler 1876: ♂ Surinam.

Synonyms. ? *chacona* Plötz 1886: Panama. Fig Seitz in genus *Ebrietas*.

beggoides Schaus 1902: Trinidad.

B.M. 2 ♂ 1 ♀ Trinidad. 2 ♂ Fr Guiana. 3 ♂ Amazons. 1 ♂ Minas Geraes. 2 ♂ Rio. 2 ♂ Novo Friborgo. 7 ♂ 1 ♀ Espirito Santo. 1 ♂ São Paulo.

2a (1). F apex more truncate and termen angled at end of vein 3: the 2 hyaline apical dots directed to between the apex and mid termen. Upf central dark band always runs broadly and continuously to the costa: in *begga* it is often broken and abbreviated. Above, violet flush absent.

2b (4). End of cuiller of clasp bent over.

2 (3). ♂ F 13–15 mm. Above, pattern more variegated and cilia generally unchequered.

beggina. 3 sub-species.

(a). White markings unh absent. End of cuiller broadly bifid, like a crab's claw.

Sub-sp. **vox** nov: ♂ S. Geronimo, Guatemala: type B.M.

B.M. 28 ♂ 6 ♀ Mexico. 9 ♂ 3 ♀ Guatemala. 1 ♀ Honduras. 1 ♂ Salvador. 3 ♀ Nicaragua. 1 ♀ Costa Rica.

(b). Unh generally plain brown, but often with more or less developed white markings, grading to *beggina*. End cuiller as in *beggina*, but with a slender neck and tapering to a single point with a slight projection before the tip, like a bird's head.

Sub-sp. **escalophoides** Hayward 1941: ♂ Misiones: described and figured by Hayward 1933 as *pyralina*.

B.M. 2 ♂ 4 ♀ Panama. 6 ♂ Colombia. 9 ♂ 4 ♀ Venezuela. 1 ♀ Trinidad. 1 ♂ Tobago. 5 ♂ 7 ♀ Amazons. 1 ♂ 1 ♀ Peru. 4 ♂ Ceara (near approach to *beggina*). 3 ♂ Bahia. 8 ♂ 1 ♀ Minas Geraes. 3 ♂ Goyaz. 9 ♂ 1 ♀ Matto Grosso. 10 ♂ 4 ♀ Paraguay. 10 ♂ 5 ♀ Argentine.

(c). Unh tornal quarter white, more or less brown spotted, as in *begga*.

Sub-sp. **beggina** Mabille 1897: Bolivia (♀ in B.M. ex coll Mabille, labelled *beggina* by him).

B.M. 18 ♂ 2 ♀ Bolivia (grading to *escalophoides*). 6 ♂ 7 ♀ São Paulo. 2 ♂ 2 ♀ Petropolis. 11 ♂ 1 ♀ Paraná. 3 ♂ 2 ♀ Novo Friborgo.

3 (2). ♂ F 11 mm. End of cuiller more elongate. Generally darker and cilia chequered. Unh tornal area more or less whitened, but not conspicuously white as in *begga* or *beggina*, with which it flies, but can readily be separated.

canda nov: ♂ Central Paraguay: P. Germain 1885: type B.M.

B.M. 7 ♂ 2 ♀ Bolivia. 8 ♂ 1 ♀ Matto Grosso. 6 ♂ 2 ♀ Paraguay.

4 (2b). End cuiller erect and inwardly serrate, quite different from the other 3 species. ♂ F 13 mm. Unh white tornal area broad. Unf with a postdiscal macular band and faint spots in spaces 2 and 3, ending in a conspicuous white bar in space 1 b. Above, paler and the dark markings contrasting more strongly.

alcandra Mabille 1878: ♂ "Brazil": type B.M.

B.M. 3 ♂ 1 ♀ Ecuador, Loja. 1 ♂ type, probably from Loja. 1 ♀ Peru, Amazonas, Chachapoyas.

E.37. OULEUS Lindsey 1925: type *fridericus* Geyer: fixed by author.

Antennae = ½ costa: apiculus obtuse from thickest part of club and beginning of the nudum of 12 segments: club slender: apiculus < rest of club. Palpi short, porrect. Wings somewhat produced: termen even: F origin of vein 2 mid base and origin of vein 11: H vein 1a = vein 8. Uncus slender, undivided: gnathos slender, long, not divided:

clasp generally with a short style. ♂ no costal fold and, typically, hind tibiae with no tuft, but in 2 species there is a recumbent tuft. Generally dark brown with inconspicuous markings.

1a (8). Uph brown, not blue.
1b (5a). Tip of uncus tapered to a point.
1c (3a). Hind tibiae with 2 pairs of spurs: no tuft in ♂.
1 (2). ♂ ♀ with 3 irregular hyaline apical spots (central spot in space 7 may be absent). ♂ upf with a faint pale brown cell spot and discal band: unf a rectangular yellow spot in space 1b just before the termen. ♀ upf outer third pale cinnamon: unf corresponding area pale yellow. ♂ F 19 mm.
cyrna Mabille 1895: ♀ Chiriqui: type B.M. Fig Seitz.
Synonyms. *simplex* Godman & Salvin 1895: ♀ (recte ♂) Panama: figured. Fig Seitz.
fasciata Godman & Salvin 1895: ♀ Panama: figured: type B.M.
B.M. 5 ♂ 1 ♀ Costa Rica. 2 ♂ 5 ♀ Panama.

2 (1). ♂ very dark brown, unmarked.
calavius. 2 sub-species.
(a). ♂ ♀ F 18–30 mm. ♀ upf outwardly paler: a hyaline apical spot in space 8. Cuiller of clasp broad, not tapered: style vestigial.
Sub-sp. **bubaris** Godman & Salvin 1895: ♀ Zapote, Guatemala: type B.M.: figured. Fig Seitz.
B.M. 2 ♀ Mexico (Cuesta de Misantla, Jalapa). 2 ♂ Guatemala, Geronimo. 1 ♂ 1 ♀ Guatemala, Zapote.
(b). ♂ ♀ 14–16 mm. ♂ above, outwardly conspicuously cinnamon-brown: upf 3 hyaline apical spots: unh dorsal half yellowish-brown with dark spots. ♀ hind tibiae with a single upper spur. Cuiller of clasp tapered: valva with a short style.
Sub-sp. **calavius** Godman & Salvin 1895: ♂ Panama, Bugaba: type B.M.: figured. Fig Seitz.
Synonym. *colotes* Godman & Salvin 1895: ♀ Panama, Bugaba: type B.M.: figured. Fig Seitz.
B.M. 1 ♂ Guatemala (Vera Paz). 1 ♂ 1 ♀ Nicaragua (Chontales). 1 ♂ 1 ♀ Panama (Bugaba).

3a (1c). ♂ ♀ hind tibiae without an upper pair of spurs and ♂ with a recumbent brush on the outside: no thoracic pouch. ♂ F 16 mm.

3 (4). ♂ ♀ upf with hyaline apical spots.

matria. 2 sub-species.

(a). Above, dark velvet brown with a pale brown postdiscal band before an equally broad dark margin and a spot end cell on both wings: hyaline apical spots on F in spaces 6 and 8 and usually in space 7. Unh yellowish-brown with dark central, discal and submarginal dark spots, arranged as usual in the genus.

Sub-sp. **dampa** nov: ♀ Fr Guiana: coll C. Bar: type B.M.
B.M. 3 ♀ Fr Guiana.

(b). ♂ upf dark velvet brown with pale brown basal and discal areas leaving a central dark area occupying mid cell and extending below the cell to base of space 3: 2 hyaline apical spots in spaces 6 and 8 (rarely also a dot in space 7). Uph with a pale brown postdiscal band. Below, dark brown: unh with faint spots. ♀ above, the pale areas violet grey and more extensive: unh the dark markings more visible.

Sub-sp. **matria** nov: ♂ Iquitos, Upper Amazons; July 1932: G. Klug: type B.M.
B.M. 2 ♂ Iquitos. 2 ♀ Peru (Tarapote. Chambireyacu, Huallaga). 1 ♀ Rio Madeira (Humayti).

4 (3). ♂ upf without apical hyaline spots. Above, dark velvet brown unmarked except for, on upf, a bar end cell and a pre-apical band from space 4 to space 8, of sparse pale brown scales. Unf dark brown, paler towards dorsum and termen and about end cell. Unh dark brown with a pale brown bar before end cell and a continuous discal band, and a pale narrow band along termen.

fatinitza Plötz 1884: Colombia: copy of Plötz's unpublished plate in B.M.
B.M. 1 ♂ S.E. Peru (Chaquimayo). 1 ♂ Upper Amazons (St Paulo).

5a (1b). Tip of uncus not tapered to a point. Hind tibiae with 2 pairs of spurs and ♂ without a tibial tuft. ♂ ♀ without hyaline spots.

5 (6a). Tip of uncus bulbous. Above, uniform dark velvet brown with more or less developed numerous small pale brown markings.

fridericus. 6 sub-species.

(a). Large, ♂ F 17 mm. Above, markings faint. Unh dark brown with small, pale brown spots.

Sub-sp. **salvina** nov: ♂ Atoyac, Vera Cruz, Mexico: figured by Godman 1895 as *caliginea*: type B.M. Fig Seitz as *coeliginea*.

B.M. 26 ♂ 8 ♀ Mexico. 8 ♂ 4 ♀ Guatemala. 1 ♀ Honduras. 2 ♂ 4 ♀ Nicaragua. 7 ♂ 1 ♀ Costa Rica. 1 ♂ "Cuba".

(b). Smaller, ♂ F 15 mm. Unh tornal quarter white with a white bar at end cell and with dark postdiscal spots extending into the white area.

Sub-sp. **panna** nov: ♂ Panama: P. Lathy: type B.M. Fig Seitz and ♂ genitalia by Godman & Salvin as *fridericus*.

B.M. 1 ♀ Guatemala. 17 ♂ 9 ♀ Panama. 1 ♂ Taboga Is. 1 ♂ 2 ♀ Gorgona Is., Colombia. 1 ♂ Isle del Rey, Pearl Islands (all black).

(c). Typically large, ♂ F 17 mm. Above, markings absent or faint. Unh dorsal half white, unmarked: usually a white bar at end cell. Variable in size and extent of white unh.

Sub-sp. **hilarina** Mabille 1878: ♂ "Para", recte ♀ Cauca, Colombia: type B.M.

B.M. 8 ♂ 6 ♀ Colombia (Cauca Valley). 2 ♂ 1 ♀ Cachabe. 5 ♂ 1 ♀ Chimbo. 1 ♂ 1 ♀ Angamarca. 1 ♂ 3 ♀ Balzapamba. 23 ♂ 6 ♀ Paramba. All Ecuador.

(d). Typically small, ♂ 13 mm., with numerous sharply defined small markings: unh plain dark brown with a pale brown cell spot and a discal series. But it grades in Colombia to a larger form (*coeliginea*) and to a dark form (*terrens*) in Venezuela, while in both these countries *panna*-like forms occur.

Sub-sp. **fridericus** Geyer 1832: ♂ Surinam: figured. Figs by Seitz and Godman & Salvin are of *panna*.

Synonyms. *coeliginea* Mabille 1883: Colombia.
thiena Plötz 1884: ? loc.
terrens Schaus 1902: Venezuela.
nigropiceus Mabille & Boullet 1917: ♂Fr Guiana.

B.M. 18 ♂ 4 ♀ Colombia (Rio Magdalena. Lake Sapatoza. Santa Marta. Bogotá). 13 ♂ 9 ♀ Venezuela. 3 ♂ 5 ♀ Br Guiana. 4 ♂ Surinam. 4 ♂ 5 ♀ Fr Guiana. 3 ♂ Peru (Chanchamayo. Huanuco. Pozuzo). 3 ♂ 1 ♀ Upper Amazons (Iquitos. Rio Purus). 12 ♂ 18 ♀ Pará.

(e). ♂ F 13 mm. Above, as *fridericus*. Below, as *panna* but the tornal pale area is yellow or sullied white: dark postdiscal band faint and suffused.

Sub-sp. **trina** nov: ♂ Trinidad: type B.M.

B.M. 41 ♂ 13 ♀ Trinidad. 1 ♂ 1 ♀ Tobago. 2 ♀ Jamaica.

(f). ♂ F 15 mm. Upf with a more or less well-marked, pale brown, broad discal band from costa to dorsum. Unh tornal third sullied white, with a white bar at end of cell and a dark postdiscal band on the white area.

Sub-sp. **riona** nov: ♂ Novo Friborgo, S. Brazil: type B.M. Fig Hayward 1948, ♂ and genitalia as *terrens*.

B.M. 10 ♂ 5 ♀ Bolivia (Santa Cruz. Yungas, La Pas). 7 ♂ 3 ♀ Bahia. 2 ♀ Goyaz. 7 ♂ 3 ♀ Minas Geraes. 17 ♂ 14 ♀ S. Brazil (Rio. Petropolis. Novo Friborgo). 1 ♂ 1 ♀ Paraguay. 1 ♂ Argentine.

6a (5). Tip of uncus is a small stalked triangle: style of clasp very slender. ♂ F 14 mm.

6 (7). Cuiller broad throughout: tip of style sharply pointed. Above, plain dark brown, unmarked except for a very faint pale postdiscal band F and H. Unh dorsal half white, intruded upon by dark bands from the dark apical area, resembling *fridericus panna*.

dilla nov: ♂ Ecuador, Chimbo: M. de Mathan, first quarter 1892: type B.M.

B.M. 2 ♂ Ecuador (type. Cachabe, low country, Nov 1896: Rosenberg).

7 (6). Cuiller tapered to a blunt point: style slightly expanded at tip. Upf with a cinnamon-coloured pre-apical area.

accedens. 3 sub-species.

(a). ♂ differs only from *accedens* in having the unh uniform, with only traces of pale markings. ♀ unh suffused yellowish-brown, a spot mid cell, another end cell and a conjoined discal series. ♂ ♀ upf have on the cinnamon-coloured area traces of paler marking as in *fridericus*.

Sub-sp. **noctis** Lindsey 1925: ♂ Peru: figured ♂ and genitalia.
B.M. 2 ♂ Peru (Marcapata. Chaquimayo). 4 ♀ Upper Amazons (Ega).
(b). ♂ upf cinnamon apical area unmarked and tapering to a black subtornal spot: uph a macular black margin, preceded by a narrow cinnamon line; unh as *accedens*. ♀ as ♂, the pale area upf is light brown: uph with a subtornal black spot: unh as *accedens*, but the dorsal yellow area is more restricted and brown shaded.

Sub-sp. **finda** nov: ♂ Espirito Santo: type B.M.
B.M. 4 ♂ 2 ♀ Espirito Santo, Brazil.
(c). ♂ above, shining black, unmarked except for a cinnamon area between end cell and apex and faint spots before end cell in spaces 2 and 3, and a postdiscal row. Unf brown, space 1b dull yellowish-brown with a faint subtornal dark spot. Unh dorsal half dull yellowish-brown with pale yellow bar end cell and faint discal and submarginal pale markings: a subtornal dark spot. ♀ upf with a broad postdiscal pale brown area broadest at costa, with vague darker markings thereon and a dark submarginal band. Uph with a broad (3 mm.) pale brown margin, centred by a faint dark macular band. Unf brown, subtornal dark spot yellow flanked on either side. Unh dorsal two-thirds yellow, and a conspicuous yellow bar at end of cell, brown flanked on either side.

Sub-sp. **accedens** Mabille 1895: ♀ Santa Catharina: type B.M.
B.M. 1 ♀ Santa Catharina. 1 ♂ "Rio R." (coll Hewitson). 2 ♂ 1 ♀ No loc (coll Kaden), 1 ♂ No loc (coll Felder). All believed to have come from Santa Catharina.

8 (1a). Uph dark shining blue with a dark brown border. Upf dark brown with a discal band of sparse, light blue scales. Below, brown, unmarked except for some faint discal spots unh. ♂ F 17 mm.

narycus Mabille 1889: ♂ S. America. Fig Seitz.
Synonyms. *micacea* Weymer 1890: ♂ Ecuador: figured. *seatoni* Weeks 1901: Bolivia. Fig Weeks 1906.
B.M. 13 ♂ Ecuador (Zamora. Ambato. R. Pastaza. Canalos). 19 ♂ Peru (Chanchamayo. Huancabamba. Pozuzo. Carabaya. Oxopampa. El Porvenir). 5 ♂ Bolivia.

E.38. ZERA Evans (p. 13): type *zera* Butler fixed by author.

Differs from *Quadrus* in having a longer antennal apiculus, nudum 6/11 instead of 3/10: absence of hyaline spots in space 1b and cell upf: termen F centrally angled. Above, purple or violet-brown with dark areas: below, more or less tawny.

1a (3a). Upf with a conspicuous hyaline spot in space 2.
1 (2). Wings produced, termen H straight. Above, powdered blue scales. Unh light blue. ♂ F 16 mm.
belti Godman & Salvin 1894: ♂ Nicaragua: type B.M.: figured, ♂ and genitalia. Fig Seitz.
B.M. 9 ♂ Nicaragua.

2 (1). Wings not produced, termen H convex. Above, no blue scaling. Cuiller and style much narrower, curved and tapered to a point. ♂ F 18 mm.
zera. 2 sub-species.
(a). Unh dorsal ½ to ¾ pale blue.
Sub-sp. **zera** Butler 1870: ♂ Venezuela: type B.M. Fig Seitz as *paterculus*.
Synonyms. *latreilliana* Mabille 1876: ♂ Brazil: type B.M. *balma* (Herrich-Schäffer MS) Plötz 1884.
B.M. 2 ♂ 4 ♀ Costa Rica. 3 ♂ Panama. 3 ♂ 2 ♀ Colombia. 5 ♂ 1 ♀ Venezuela. 9 ♂ 5 ♀ Ecuador (Paramba. Chimbo. Balzapamba). 19 ♂ 2 ♀ S. Brazil.
(b). As *zera*, but unh entirely pale tawny.
Sub-sp. **difficilis** Weeks 1901: ♂ Bolivia. Fig Weeks 1905.
Synonyms. *concolor* Mabille & Boullet 1916: ♂ Panama. *deflorata* Draudt 1922: Bolivia: figured.
B.M. 1 ♂ Br Guiana (very small). 1 ♂ Peru (Moyabamba). 7 ♂ 1 ♀ Bolivia. 1 ♂ 1 ♀ Upper Amazons (Ega. S. Paulo de Olivenca). 1 ♂ 1 ♀ Pará. 1 ♀ "Brazil".

3a (1a). Upf no hyaline spot in space 2, always a spot in space 3 and 1 to 3 apical spots.
3b (5a). Upf the dark central area extends to the base and to lower end of cell: 3 apical spots.
3 (4). Upf a dark bar at end of cell. Unh dorsal half bluish-white, but the tawny colouring from the costal

half runs narrowly along the termen to vein 1b. Tip of cuiller produced inwards and tapered to a point. ♂ F 20 mm.

nolckeni Mabille 1891: Bogotá.

Synonym. *scybis* Godman & Salvin 1894: ♂ Mexico: type B.M.: figured. Fig Seitz.

B.M. 1 ♂ Mexico. 3 ♂ Panama. 4 ♂ Colombia. 10 ♂ Venezuela. 4 ♂ Ecuador (Loja. Ambato). 10 ♂ Peru (Cuzco. Chanchamayo. Huancabamba). 16 ♂ Bolivia (Cochabamba. Tanampaya. San Jacinthe).

4 (3). Upf no dark bar at end of cell. Cuiller long, broad and straight, not tapered: tip rounded, ending in a point on the inside. ♂ F 18–20 mm.

phila. 2 sub-species.

(a). Unh dorsal $\frac{1}{2}$ to $\frac{2}{3}$ bluish-white.

Sub-sp. **hosta** nov: ♂ Costa Rica: type B.M.

B.M. 2 ♂ Costa Rica. 4 ♂ Columbia.

(b). Unh entirely tawny, with some small black spots.

Sub-sp. **phila** Godman & Salvin 1894: ♂ Panama: type B.M.: figured. Fig Seitz.

B.M. 2 ♂ Panama. 1 ♂ Ecuador. 1 ♂ 1 ♀ Peru (La Merced. Cuzco). 4 ♂ Bolivia (Yungas, La Paz).

5a (3b). Upf dark central area not extending to the base, which is broadly violaceous, nor to the end of the cell.

5 (6). Unf tornal area broadly tawny, often reaching the costa and unmarked, except sometimes with an inconspicuous dark discal spot. F tornus truncate and dorsum slightly concave. Cuiller long, tapered to a blunt point. F usually with 3 apical spots. ♂ F 17 mm.

hyacinthinus. 3 sub-species.

(a). Unh tornal half bluish-white.

Sub-sp. **hyacinthinus** Mabille 1877: ♂ ? loc (agrees with specimen from Panama): type B.M. Fig Seitz.

Fig by Godman & Salvin is *tetrastigma*: Hayward's 1948 is *servius*.

B.M. 4 ♂ 3 ♀ Mexico. 1 ♂ 1 ♀ Guatemala. 1 ♂ Honduras. 1 ♂ Nicaragua. 1 ♂ 2 ♀ Costa Rica. 5 ♂ 1 ♀ Panama. 2 ♂ Colombia.

(b). Similar, but the dorsal area unh is whiter. Unf tawny area brighter and the apex is tipped with a conspicuous tawny spot. Uph the dark discal band absent. H termen more convex.

Sub-sp. **servius** Plötz 1884: Brazil. Fig Hayward 1948, ♂ and genitalia as *hyacinthinus*.

B.M. 5 ♂ 6 ♀ S. Brazil (São Paulo. Paraná. Rio).

(c). Unh entirely tawny as in *phila*. Unf also entirely tawny, dark markings reduced and the apical end of the submarginal dark band is macular (also on upf).

Sub-sp. **gellius** Mabille 1904: "Ecuador", Fig Hayward 1948, ♂ as *erisichton*.

B.M. 3 ♂ Argentine (Tucuman).

6 (5). Unf tornal tawny area restricted and marked with a large dark central spot. F termen not truncate at tornus. Cuiller of clasp short and broad: tip rounded ending in a point as in *phila*. ♂ F 15–16 mm.

tetrastigma. 2 sub-species.

(a). Unf dark brown, except at tornus, where it is narrowly ochreous on either side of a large dark spot. Unh very variable: normally (*tetrastigma*) dark brown with well-marked black central and submarginal bands: some individuals (*menedemus*) have the dorsal half white: others (*pelopea*) are entirely dark with the bands absent or vestigial. Upf usually only one apical spot.

Sub-sp. **tetrastigma** Sepp 1848: ♂ Surinam: figured, ♂, ♀, larva, pupa and food plant.

Synonyms. *menedemus* Godman & Salvin 1894: ♂ Panama: type B.M. figured. Fig Seitz.

pelopea Godman & Salvin 1894: ♂ Amazons: figured. The Godman & Salvin figures of *hyacinthinus*, ♂ and genitalia are referable to *tetrastigma*.

B.M. 2 ♂ Guatemala. 2 ♂ Nicaragua. 2 ♂ Panama. 1 ♂ Colombia. 2 ♂ 2 ♀ Trinidad. 1 ♀ Br Guiana. 2 ♂ 2 ♀ Fr Guiana. 2 ♂ Peru (Chanchamayo. Chaquimayo). 1 ♀ Bolivia (Buenavista). 4 ♂ Upper Amazons (Iquitos. Tonantins. S. Paulo de Olivenca). 12 ♂ 13 ♀ Pará.

(b). Unf tawny tornal area broader and in ♀ extends narrowly to costa. Unh tawny with a dark apex and dark discal spots. Above, the violaceous areas more extensive. Upf usually 2 apical spots.

Sub-sp. **erisichthon** Plötz 1884: ? loc: copy of unpublished fig in B.M. Fig Seitz: Hayward 1948 figs are *gellius*. B.M. 1 ♂ 1 ♀ Bahia. 6 ♂ 4 ♀ S. Brazil (São Paulo. Rio. Paraná). 3 ♂ 3 ♀ Paraguay.

7. Above black, plain. Unf brown, faint spot in space 8: unh pale bar at end of cell. Clasp like *belti*. ♂ F 18 mm.

eboneus Bell 1947: ♂ Vera Cruz: genitalia figured. Probably aberration or sub-species of *belti*. Unidentified or not in B.M.

E.39. QUADRUS Lindsey 1925: type *cerealis* Stoll: fixed by author.

Antennae = ½ costa: shaft plain: bent to an obtuse apiculus at or just after thickest part of club: apiculus = ½ rest of club: nudum 3/11 to 2/9. Palpi short. H termen straight. Generally with conspicuous hyaline spots upf: uph blue or grey banded: unh usually blue. ♂ no costal fold, nor a tibial tuft, except in one sub-species of *deyrollei*. Uncus undivided: valva short, with or without a short style. Hind tibiae with 2 pairs of spurs.

1a (6a). Upf no hyaline spot at apex in space 9. Unh mostly blue with dark markings.

1b (4a). Uph pale bands narrow, grey-blue. Nudum 3/10.

1 (2a). Clasp with a style: cuiller broad, blunt, straight. There are 2 more or less intergrading forms: small, ♂ F 14 mm., dull, with a broad, brown border unh: large, ♂ F 15 mm., bright, with the blue colour unh reaching the termen. The spotting F is very variable.

cerealis Stoll 1782: ♂ Surinam: figured. Fig Sepp: Seitz: Godman & Salvin, genitalia: Hayward 1948, ♂ and genitalia.

Synonyms. *orcus* Fabricius 1793: Indiis. Fig Donovan 1800.

cerberus Huebner 1820.

ineptus Draudt 1922: ♂ Peru: figured. ? aberration.

majorinus Draudt 1922: Bolivia: figured.

B.M. 9 ♂ 9 ♀ Mexico. 7 ♂ 5 ♀ Guatemala. 2 ♂ 4 ♀ Honduras. 2 ♂ 2 ♀ Nicaragua. 1 ♂ Costa Rica. 4 ♂ 6 ♀ Panama. 10 ♂ 8 ♀ Colombia. 6 ♂ 8 ♀ Venezuela. 10 ♂ 1 ♀ Trinidad. 5 ♂ 11 ♀ Br Guiana. 3 ♂ 4 ♀ Surinam. 11 ♂ 10 ♀ Fr Guiana. 3 ♂ 2 ♀ Ecuador. 8 ♂ 4 ♀ Peru. 6 ♂ 8 ♀ Bolivia. 9 ♂ 16 ♀ Upper Amazons. 13 ♂ 17 ♀ Pará. 5 ♂ 7 ♀ Bahia. 1 ♂ 1 ♀ Maranham. 6 ♂ 7 ♀ Pernambuco. 3 ♂ 3 ♀ Matto Grosso. 13 ♂ 8 ♀ S. Brazil. 8 ♂ 9 ♀ Paraguay. 15 ♂ 7 ♀ Argentine.

2a (1). Clasp without a style: cuiller bent in and tapered.
2 (3). Tapered part of cuiller short. ♂ F 14 mm. Very like the small form of *cerealis.* Upf lower arm of cell spot divided and spot in space 2 small. Unh with a broad, brown border and conspicuous dark spots on the blue area, 2 in space 7, 1 before end cell and a discal row from space 2 to space 6.

fanda nov: ♂ Pará: A. M. Moss: type B.M.
B.M. 11 ♂ 8 ♀ Pará. 5 ♂ Rio.

3 (2). Tapered part of cuiller long. ♂ F 18 mm. Very like the large form of *cerealis.* Upf broad, continuous, blue band from outside the apical spots to dorsum: inner edge of spot in space 2 concave. Uph with an inner and outer blue band meeting near costa and the area between plain brown. Unf with a blue postdiscal band as on upf. Unh the light blue colouring covering the entire wing except for the brown apex, dark spots inconspicuous or absent.

tros nov: ♂ Espirito Santo: type B.M.
B.M. 1 ♂ Minas Geraes. 7 ♂ 7 ♀ S. Brazil (São Paulo. Petropolis. Novo Friborgo. Espirito Santo).

4a (1b). Uph bands clear bright blue. Nudum 2/9.
4 (5). Uph blue discal band separated from termen except at tornus and with a narrow blue band along termen. Clasp without a style. ♂ F 16 mm.

contubernalis. 2 sub-species.
(a). ♂ upf hyaline spots absent except for minute dots at apex and in space 2. ♀ above, dark brown with pale brown instead of blue bands: upf spots more complete, but lower cell spots absent: unf with a pale brown band

beyond the discal spots, widening towards dorsum: unh shining pale blue as in ♂, but with a broad brown border widening towards apex: F 18 mm.

Sub-sp. **anicius** Godman & Salvin 1893: ♂ Guatemala: type B.M.: figured. Fig Seitz.

B.M. 2 ♂ 1 ♀ Guatemala.

(b). ♂ upf spotted as in *cerealis*: lower cell spot usually divided into two and no spot in space 1b: sometimes a narrow blue band outside the hyaline spots. ♀ uph blue bands reduced or faint.

Sub-sp. **contubernalis** Mabille 1883: ♂ Brazil: type B.M Fig. Godman & Salvin, ♂ and genitalia: Seitz.

Synonym. *praxis* Plötz 1884: Fr Guiana.

B.M. 1 ♂ 3 ♀ Guatemala. 14 ♂ 2 ♀ Costa Rica. 4 ♂ 3 ♀ Panama. 15 ♂ 5 ♀ Colombia. 3 ♂ 3 ♀ Venezuela. 5 ♂ 1 ♀ Ecuador (Quito. R. Napo. La Chima). 1 ♂ Peru (Pozuzo). 1 ♂ Pará. 3 ♂ 1 ♀ Upper Amazons (Pebas. Ucayali. Obidos).

5 (4). Uph blue discal area extends to termen and is twice as wide as the dark central band.

deyrollei. 3 sub-species.

(a). ♂ uph hyaline spots absent or vestigial: ♀ with fully developed spots as in the other 2 sub-species. Blue colouring above, greenish instead of clear blue as in the other sub-species. ♂ hind tibiae with a tuft fitting into a thoracic pouch, but less developed than usual. ♂ F 13 mm.

Sub-sp. **deyrollei** Mabille 1877: ♀ Fr Guiana. Fig in Seitz of *festivus* probably is *deyrollei* ♀.

B.M. 4 ♂ Colombia. 9 ♂ Br Guiana. 8 ♂ 4 ♀ Fr Guiana. 1 ♂ Surinam. 1 ♂ Amazons (Obidos).

(b). ♂ upf with the hyaline spots imperfectly developed and apical spots usually absent. ♂ hind tibiae without a tuft. ♂ F 13 mm.

Sub-sp. **portulana** Plötz 1884: S. America. Specimen in B.M. compared by Godman & Salvin with Plötz's unpublished figure.

B.M. 13 ♂ 5 ♀ Pará.

(c). Upf black: 3 central hyaline spots, in space 11 and upper and lower in cell: 3 discal, in spaces 2 (linear), 3 and cell (outer spot): 3 apical, in spaces 6, 7, 8: usually with blue spots outside the hyaline spots, largest spot in space 1b. Uph as *deyrollei*. Unf blue spots faint, but the 2 spots in space 1b are large and pale, also there are 2 irregular dots under the spot in space 2. Unh blue from base to termen: apex black and black submarginal spots in spaces 1b to 3, discal in spaces 4, 5, 6 as well as a central and basal spot in space 7. ♀ as ♂. ♂ no tibial tuft. ♂ F 14–16 mm.

Sub-sp. **porta** nov: ♂ Teffe, Amazons: type B.M. Fig Seitz as *cordus*.

B.M. 2 ♂ Ecuador. 5 ♂ Peru (Pachitea. Chaquimayo. R. Huallaga). 12 ♂ 7 ♀ Upper Amazons (Teffe. Ega. Tonantins. S. Paulo de Olivenca).

6a (1a). Upf with a hyaline spot in space 9. Uph brown.

6 (7a). Termen F and H evenly convex. Upf spot in space 2 not larger than the other spots. Unh costal half black, dorsal half white. Clasp without a style. ♂ F 15–16 mm.

u-lucida Plötz 1884: Colombia. Fig Seitz: Hayward 1948, ♂ and genitalia.

Synonyms. *lucida* Mabille & Boullet 1912: mis-spelling. *mimus* Mabille & Boullet 1906: ♀ Brazil.

B.M. 1 ♀ Goyaz. 1 ♀ Paraná. 1 ♂ Rio Grande. 4 ♂ 1 ♀ Paraguay. 1 ♂ Argentine.

7a (6). Termen F excavate from end of vein 2 to tornus and H produced at end of vein 7, as in *Gindanes*, which also has very similar markings. F spot in space 2 much larger than any other spot.

7 (8). Unh brown. F dorsum straight. Cuiller narrow.

lugubris. 2 sub-species.

(a). ♂ F 15 mm. Upf lower limb of cell spot often divided.

Sub-sp. **lugubris** Felder 1869: ♂ Orizaba. Fig Seitz: Godman & Salvin, ♂ and genitalia.

Synonyms. *obscurascens* Mabille & Boullet 1917: ♂ Mexico.

B.M. 8 ♂ 8 ♀ Mexico. 11 ♂ 8 ♀ Guatemala. 1 ♂ 1 ♀ Nicaragua. 3 ♂ 2 ♀ Costa Rica.

(b). Darker and smaller, ♂ F 13 mm.: markings reduced: upf back of cell spot may be divided.

Sub-sp. **ophia** Butler 1870: ♀ Venezuela: type B.M.

Synonyms. *sephara* Hewitson 1878: ♂ "Brazil": type B.M.

cobarus Möschler 1878: ♀ Colombia. Name used incorrectly for *u-lucida* Plötz by Mabille and Seitz.

ambla Plötz 1882: S. America.

B.M. 1 ♀ Colombia. 5 ♂ 7 ♀ Venezuela. 20 ♂ 17 ♀ Trinidad. 2 ♂ Br Guiana. 1 ♂ 1 ♀ "Brazil" (coll Hewitson).

B (7). Unh basal half to two-thirds white with a blue tinge. Dorsum F concave. Cuiller very broad. ♂ F 18 mm. Upf hyaline spots very large, except for the apical spot in space 6, which may be a dot or absent.

truncata Hewitson 1870: ♂ Ecuador: type B.M. Fig Hewitson 1870: Seitz.

B.M. 6 ♂ Ecuador (Rio Pastaza). 8 ♂ Peru (Cuzco. San Remo. Huancabamba. Carabaya). 18 ♂ Bolivia (La Paz. Cochabamba. Tanampaya. Reyes. Coroico. Chulumani).

E.40. GINDANES Godman & Salvin 1895: type *brebisson* Latreille: fixed by Lindsey 1925 as *panaetius* Godman & Salvin, which is a sub-species of *brebisson*.

Antennae short: apiculus long, beginning shortly after beginning of club, nudum 18 segments: shaft plain. Palpi short: second segment erect, third short and stout. H tibiae with the upper pair of spurs tending to be reduced. F cut in at tornus from mid space 2, where it is concave. H elongate at end of vein 7, thence straight to tornus. ♂ no costal fold: hind tibia with a dense hair tuft fitting in a thoracic pouch.

Ia (3). Upf light brown with a dark central area.

1 (2). Uph no broad white area before termen. Unh pale brown, dorsum only whitish. Upf no spot in cell and only a single apical spot, in space 8. End of uncus tapered.

brontinus. 2 sub-species.

(a). Upf central dark area as a narrow band: discal hyaline spots narrow: apical area from vein 2 and beyond cell, dark brown. ♂ F 18 mm.

Sub-sp. **brontinus** Godman & Salvin 1895: ♂ Nicaragua: type B.M.: figured, ♂ and genitalia. Fig Seitz.

B.M. 5 ♂ Nicaragua.

(b). Upf central dark area broken into 4 spots (2 in cell, 1 each on costa and space 1b); discal hyaline spots large as in *brebissoni*: no apical dark area. ♂ F 20 mm.

Sub-sp. **bronta** nov: ♂ Peru, Chanchamayo: type B.M.

B.M. 1 ♂ Ecuador. 2 ♂ Peru (Chanchamayo). 1 ♀ Matto Grosso. 1 ♀ Espirito Santo, S. Brazil.

2 (1). Uph broadly white before termen. Upf with a hyaline spot in cell over the spot in space 2. Uncus end bulbous.

brebissoni. 4 sub-species.

(a). Unh pale yellowish-brown, base and termen narrowly brown. Uph submarginal white area broad. ♂ F 17 mm.

Sub-sp. **panaetius** Godman & Salvin 1895: ♂ Nicaragua: type B.M.: figured ♂ and genitalia. Fig Seitz.

B.M. 1 ♀ Nicaragua. 5 ♂ 1 ♀ Panama. 1 ♂ "Santa Catharina".

(b). Unh white. Upf hyaline spots yellow, very large and numerous: two in space 1b: in spaces 2, 3 and cell close together: inverted L-shaped spot in cell and spots in spaces 10 and 11 above it: apical spots in spaces 6, 7 (small), 8, 9 (large): tiny dots in spaces 4, 5. Uph as *brebissoni*. ♂ F 20 mm.

Sub-sp. **brebna** nov: ♂ Bolivia, Cochabamba: P. Germain: type B.M.

B.M. 1 ♀ S. Peru (Carabaya, 6,000 ft.). 1 ♂ Bolivia (type).

(c). Unh pale blue as in *brebissoni* from which it only differs in upf usually with one hyaline apical spot, and the spots in space 1b are small, smaller than the spot in space 3.

Sub-sp. **phagesia** Hewitson 1868: ♂ Pará: type B.M.: Fig Hewitson 1873.

B.M. 1 ♂ Peru (Amazonas). 1 ♂ Bolivia. 4 ♂ 3 ♀ Upper Amazons (Ega. S. Paulo de Olivenca). 4 ♂ 3 ♀ Pará.

(d). Upf generally no hyaline apical spot: lower spot in space 1b as large as the spot in space 3. Uph submarginal white area narrow. Unh pale blue. ♂ F 17 mm.

Sub-sp. **brebissoni** Latreille 1824: ♂ Brazil: type B.M. Fig Seitz.

B.M. 1 ♂ 2 ♀ Paraná. 2 ♂ 2 ♀ Rio. 15 ♂ 6 ♀ São Paulo. 1 ♂ 7 ♀ Brazil. 1 ♂ Santa Catharina.

3 (1a). ♀ upf uniform dark brown: hyaline central spots as in *brebissoni* in spaces 1b, 2, 3 and cell: 3 conspicuous apical spots in spaces 6, 7 and 8. Uph conspicuous blue scaling along lower half of termen. Unh basal and dorsal two-thirds blue scaled. ♀ F 16 mm.

bora nov: ♀ Espirito Santo: type B.M.

B.M. Only the type.

E.41. PYTHONIDES Hübner 1819: type *jovianus* Stoll: fixed by Butler 1870.

Synonym. *Ate* Godman & Salvin 1897: type *jovianus* Stoll: fixed by authors.

Differs from *Quadrus* in respect of the antenna, which has the shaft plain and the apiculus obtuse from the beginning of the nudum of 15 segments: apiculus = unbent part of club. The F is more, and H less, produced than in *Quadrus*. The hind tibiae generally have the upper pair of spurs absent or represented by a single spur. All males (except *lancea grandis* and *eminus*) have a tuft on the hind tibiae entering a thoracic pouch. Most of the species have the hyaline spots and blue coloration of *Quadrus*, but the 3 last species are superficially like *Pellicia costimacula*.

1a (5a). Unh veins black on a blue or white ground. Upf with hyaline spots. Sexes alike.

1b (3a). Palpi below yellow. Upf with large conjoined central spots: no apical spots.

1 (2). Upf with 2 long cell spots. Uph and unh blue, cell entirely white extending to mid-way between end and termen. Hind tibiae with 2 upper spurs, no tuft in ♂. Antennal nudum 13 segments. ♂ F 17 mm.

lancea Hewitson 1868: ♂ ? loc.: for fig by Geyer 1832 of *jovianus*. Fig Seitz: Hayward 1948, ♂ and genitalia.

B.M. 23 ♂ 5 ♀ S. Brazil (Paraná. São Paulo. Rio. Espirito Santo). (2 ♂ Minas Geraes, 25 ♂ 7 ♀ S. Brazil were destroyed by a flying bomb in 1944.)

2 (1). Upf upper cell spot vestigial. Uph brown with black-veined white central band, extending nearly to dorsum. Unh white with a broad, brown marginal band. Hind tibia with a single upper spur: ♂ with a dense tuft. Antennal nudum 16 segments. ♂ F 20 mm.

tullia nov: ♂ Brazil, Rio de Janeiro, Laguna de Sacuaresma; P. Germain; Aug 1884: type B.M.

B.M. 2 ♂ Rio. (1 ♂ Minas Geraes, 1 ♂ Rio, destroyed by flying bomb 1944.)

3a (1b). Palpi below white. H tibiae without upper spurs.

3 (4). Upf with a straight row of 3 to 4 apical spots. ♂ F 18 mm.

jovianus. 4 sub-species.

(a). Upf central hyaline band compact. Uph blue.

Sub-sp. **amaryllis** Staudinger 1876: ♂ Chiriqui. Fig Seitz: Godman & Salvin.

B.M. 2 ♂ Mexico. 7 ♂ 3 ♀ Guatemala. 1 ♂ Honduras. 1 ♀ Nicaragua. 3 ♂ 3 ♀ Costa Rica. 18 ♂ 7 ♀ Panama. 18 ♂ 6 ♀ Colombia. 2 ♂ "Surinam". 22 ♂ 10 ♀ Ecuador (Paramba. Chimbo. Balzapamba. Zamora. Canalos). 1 ♂ Peru.

(b). Upf central band broken. Uph blue.

Sub-sp. **jovianus** Stoll 1782: Surinam: figured. Fig Seitz: Hayward 1948. Fig in Jones Icones quoted by Fabricius 1793 is *fabricii*: by Geyer 1832 is *lancea*.

Synonyms. *pseudo-jovianus* Westwood 1852: name for *jovianus* Stoll nec Fabricius.

pluvius Herrich-Schäffer 1869.

B.M. 1 ♂ Guatemala. 1 ♂ 1 ♀ Colombia. 1 ♂ 1 ♀ Trinidad. 14 ♂ 6 ♀ Br Guiana. 5 ♂ 6 ♀ Surinam. 23 ♂ 17 ♀ Fr Guiana. 3 ♀ Ecuador (R. Napo). 3 ♂ 1 ♀ Peru (Chanchamayo). 39 ♂ 16 ♀ Upper Amazons (Upper Putumayo. Iquitos. Obidos).

(c). Upf central band broken. Uph with a white-streaked central area.

Sub-sp. **crameri** Mabille & Boullet 1916: ♂ Colombia. Fig Hayward 1948, and genitalia.
Synonym. *suppar* Draudt 1922: Colombia: figured.
B.M. 3 ♂ 1 ♀ Colombia. 15 ♂ 5 ♀ Amazons (Teffe. Ega. S. Paulo de Olivenca. Fonte Boa. Santarem).
(d). Upf central band compact. Uph with a white-streaked central area.

Sub-sp. **fabricii** Kirby 1871: for *jovianus* Fabricius nec Cramer, as figured by Donovan 1900. Fig Seitz.
B.M. 2 ♂ Colombia. 1 ♂ Fr Guiana. 4 ♂ "Guiana" (coll Felder). 1 ♂ Peru (San Gaban). 1 ♀ Bolivia. 8 ♂ 6 ♀ Amazons (Tapajos. Itaituba. Tonantins. Santarem). 21 ♂ 13 ♀ Pará. 1 ♀ Maranham. 4 ♂ Minas Geraes. 9 ♂ 2 ♀ Matto Grosso. 7 ♂ 2 ♀ S. Brazil (São Paulo. Rio. Espirito Santo).

4 (3). Upf no apical spots: separated central spots in spaces 2 and 3 and 2 in cell (sometimes reduced = *cohaerens*). Uph with a blue band before middle (sometimes very broad = *lata*). ♂ F 16 mm.

lerina Hewitson 1868: ♂ Fr Guiana: type B.M. Fig Hewitson 1871: Seitz: genitalia by Williams & Bell 1931.
Synonyms. *lata* Mabille & Boullet 1916: ♂ Fr Guiana.
cohaerens Mabille & Boullet 1916: ♀ Fr Guiana.
B.M. 1 ♂ Venezuela. 1 ♀ Surinam. 1 ♂ 4 ♀ Fr Guiana. 1 ♂ 1 ♀ Peru (Chaquimayo). 7 ♂ Upper Amazons (Iquitos). 8 ♂ 1 ♀ Pará. (1 ♀ Colombia., 1 ♂ Surinam, 1 ♂ Fr Guiana, 1 ♂ Ecuador, La Chima, 1 ♂ 1 ♀ Peru, Marcapata, 2 ♂ 1 ♀ Pará, 1 ♂ 2 ♀ Upper Putumayo, destroyed by flying bomb.)

5a (1a). Unh veins not black.
5b (11a). Upf with hyaline spots (may be absent in individuals of *herennius*).
5c (7a). Upf apical spots extend into space 9.
5 (6). Hind tibiae with a single upper spur: no tuft in ♂. ♂ uph outer two-thirds unmarked pale blue: unh all pale blue except for a narrow dark area at apex.

grandis. 2 sub-species.
(a). ♂ F 16 mm. ♀ uph blue area restricted and brown shaded, with dark discal and submarginal spots: unh as in ♂.

Sub-sp. **assecla** Mabille 1883: ♀ "E. Brazil": type B.M. Fig Hübner Exot Schmett 3, pl 33/1, 2, ♂ as *Pythonides orcus* (nec 3, 4, ♀ which is *cerealis*). Fig Seitz.
B.M. 1 ♂ 1 ♀ Fr Guiana. 8 ♂ 6 ♀ Upper Amazons. 3 ♀ Pará. (1 ♂ Honduras, 1 ♀ Nicaragua, 1 ♂ 2 ♀ Colombia, 1 ♀ Br Guiana, 12 ♂ 3 ♀ Fr Guiana, 2 ♂ Peru (Chanchamayo. Tarapote), 10 ♂ 3 ♀ Amazons, destroyed by flying bomb in 1944).
(b). ♂ F 20 mm. ♀ uph blue area more restricted, nearly absent: unh bluish-white, shaded brown along the borders.

Sub-sp. **grandis** Mabille 1878: ♀ "Pará": type B.M.
B.M. 1 ♂ Goyaz. 1 ♀ type. 1 ♀ Espirito Santo. (1 ♀ Matto Grosso destroyed by flying bomb in 1944).

6 (5). H tibiae without upper spurs: ♂ with a tuft. ♂ ♀ uph dark brown with narrow powdery blue central and discal bands: unh bright blue except for a conspicuous brown apical area. ♂ F 20 mm.

parallelus Mabille 1897: ♂ Bolivia: figured.
Synonyms. *aequatoria* Mabille 1904: ♀ Ecuador: type B.M.
chalybaeus Hayward 1941: ♂ Ecuador: genitalia figured.
B.M. 3 ♂ 1 ♀ Ecuador (Zamora). 3 ♂ Bolivia.

7a (5c). Upf no spot in space 9.
7 (8a). Hind tibiae without upper spurs: ♂ with tuft. ♂ ♀ unh blue, more or less black spotted. ♂ F 16 mm.

herennius. 3 sub-species.
(a). ♂ ♀ uph outer third unsullied bright blue, basal area black, unmarked. Upf hyaline spots much reduced and may be entirely absent.

Sub-sp. **proxenus** Godman & Salvin 1895: ♂ Guatemala: type B.M.: figured ♂ and genitalia. Fig Seitz.
Synonym. *canace* Schaus 1913: ♂ Costa Rica: figured. Fig Seitz.
B.M. 5 ♂ Guatemala. 1 ♂ Honduras. 4 ♂ 1 ♀ Costa Rica. 4 ♂ 2 ♀ Panama. 7 ♂ 1 ♀ Colombia. 3 ♂ Venezuela. 3 ♂ "Fr Guiana" (coll Felder). 5 ♂ Ecuador (Paramba. Balzapamba).
(b). ♂ uph outer blue area more or less black spotted and

with a narrow blue band on the black basal area. ♀ uph with narrow central, discal and faint submarginal powdery blue bands. Upf hyaline spots fully developed and all equally small.

Sub-sp. **herennius** Geyer 1838: ♂ Brazil: figured.

Synonym. *lagia* Hewitson 1868: for *herennius*, wrongly assumed to be a homonym of *herennius* Stoll.

B.M. 1 ♂ Panama. 3 ♂ 2 ♀ Colombia. 4 ♂ 3 ♀ Br Guiana. 4 ♂ 4 ♀ Fr Guiana. 2 ♂ Ecuador. 5 ♂ Peru (Loreto. Amazonas). 1 ♂ Bolivia. 3 ♂ Pebas. 4 ♂ 3 ♀ Teffe. 4 ♂ Iquitos. 1 ♂ 1 ♀ S. Paulo de Olivenca. 1 ♂ Rio Madeira. 6 ♂ 1 ♀ Santarem. 1 ♂ 1 ♀ Obidos. 14 ♂ 2 ♀ Pará.

(c). Upf hyaline spots in spaces 2 and 3 much more conspicuous than the other spots. Uph like *herennius* but in ♂ the blue area is generally unsullied and in ♀ the discal and submarginal blue bands tend to be enlarged and nearly conjoined.

Sub-sp. **lusorius** Mabille 1891: ♂ Rio.

Synonym. *cordus* Mabille 1897: ♂ Santa Catharina: figured. Fig in Seitz is *Quadrus deyrollei portulana*.

B.M. 4 ♂ Bahia. 1 ♂ Minas Geraes. 1 ♂ Matto Grosso. 20 ♂ 7 ♀ S. Brazil (Rio. Espirito Santo. Theresopolis).

8a (7). Hind tibiae with a single upper spur.

8 (9a). ♀ upf discal hyaline spots much larger than the apical spots. Resembles *parallelus*, but blue areas only represented by a few scales. Upf 2 long, equal, parallel hyaline cell spots and streak above, in space 11, nearly = cell spots: discal spots in spaces 2 and 3 quadrate, contiguous at corners: irregular apical spots in spaces 6, 7, 8. Unh light shining blue with a 2½ mm. wide brown border from dorsum to costa. ♀ F 18 mm.

braga nov: ♀ Br Guiana, Roraima: type B.M.

B.M. 2 ♀ type loc.

9a (8). Upf central and apical hyaline spots small and equal.

9 (10). Unh entirely bluish-white except for a brown apex and spot mid space 7. ♂ above brown, paler beyond end cell F and broadly beyond the hyaline spots to the termen, leaving a postdiscal band of dark spots: some obscure blue scaling before the termen H, but no blue

bands as described for the ♀ type. Upf small hyaline spots, 2 in space 1b, across spaces 2, 3, 4, apical in spaces 6, 7, 8 (irregular), mid costa, upper and 2 lower spots in cell. Uph a pale central area isolating an irregular central dark band, in addition to the macular postdiscal band. Unf plain brown except for some blue scaling in spaces 1b and 2, about the discal hyaline spots and at termen. ♂ F 19 mm. ♂ hind tibiae with tuft.

vicinus Mabille & Boullet 1916: ♀ Brazil.
B.M. 1 ♂ Espirito Santo.

10 (9). Unh costal third dark brown, dorsal area white, with a white bar end cell and narrow white discal and submarginal bands running into the dark area from vein 5 to vein 7. Above, ochreous-brown with small hyaline spots as in *herennius* and *vicinus*, but no spots in space 1b. Uph outer half paler with dark central and submarginal bands. Unf as upf but in space 1b there are 2 whitish discal spots and a white, black-centred area beyond. ♀ F 14 mm.

homer nov: ♀ Chapada, Matto Grosso: July: H. H. Smith: type B.M.
B.M. Only the type.

11a (5b). Upf without hyaline spots.
11b (13a). Hind tibiae with a single upper spur: ♂ with a tuft.
11 (12). Uph outer third blue. ♂ F 16 mm.

limaea. 2 sub-species.
(a). Uph the outer third cerulean blue. Upf the blue spots reduced.

Sub-sp. **pteras** Godman & Salvin 1895: ♂ Panama: type B.M.: figured. Fig Seitz.
B.M. 1 ♀ Guatemala. 3 ♂ 2 ♀ Panama. 1 ♂ Colombia.
(b). Uph the outer third grey-blue. Unh the blue area less extensive.

Sub-sp. **limaea** Hewitson 1868: ♂ Fr Guiana: type B.M. Fig Hewitson 1871: Seitz.
Synonyms. *jabesa* Butler 1870: ♀ Venezuela: type B.M.
caeruleus Plötz 1884: ♂ Brazil.
B.M. 4 ♂ 4 ♀ Venezuela. 1 ♂ Trinidad. 1 ♂ Surinam.

3 ♂ 1 ♀ Fr Guiana. 3 ♂ 1 ♀ Upper Amazons (Ega. Iquitos). 3 ♂ 1 ♀ Pará. 1 ♂ Bahia. 10 ♂ 7 ♀ S. Brazil (Santa Catharina. Rio).

12 (11). Uph plain dark brown. This and the next two species superficially resemble *Pellicia costimacula*. Upf brown with a broad black central area from dorsum to cell, where it forks into a central and discal band to the costa: broadly black before termen: small blue spots as in *limaea*, mid costa, in cell and 3 at apex. Unf with a dark discal band followed by a paler band beyond termen. Unh costa brown, rest paler grey-brown with dark bands. Palpi below, grey. ♂ F 16 mm.

neivai Hayward 1940: ♂ Ecuador: genitalia figured.
B.M. 1 ♂ Amazons (Ega).

13a (11b). Hind tibiae with no upper spurs. No blue spots or blue colouring.

13 (14). ♂ hind tibiae without a tuft. Above, like *neivai*, but the pale areas along the costa are wider and have a slaty-violet glaze. ♂ F 16 mm.

eminus. 2 sub-species.

(a). Unf brown with the apex yellow tipped and a square, dull yellowish patch at tornus. Unh tornal third dull yellowish-white, unmarked, and a yellowish bar at end of cell.

Sub-sp. **pasha** nov: ♂ Chapada, Matto Grosso: H. H. Smith: type B.M.
B.M. Only the type.

(b). Unf no yellowish markings. Unh violet-brown with 2 obscure narrow dark bands.

Sub-sp. **eminus** Bell 1934: ♂ Peru: genitalia figured.
B.M. 2 ♂ Fr Guiana. 1 ♂ Espirito Santo.

14 (13). ♂ hind tibiae with a tuft and thoracic pouch. ♂ above, with markings as described for the ♀ but much darkened: upf appearing to be black with a cupreous discal band and similar area about end cell: unh whitish area restricted to one-third of the wing. ♀ above, shining cupreous with dark markings: upf the inner fork of the central dark band has an adjoining projection to end cell, while the outer fork runs as a macular discal band, curving round end cell to vein 9: a submarginal dark band. Uph with a straight macular dark band from dorsum to costa through cell and an outer fork from vein 3 curving round as a large spot beyond end cell: a submarginal dark band. Unf pale, shining brown with a submarginal macular dark band, bordered on either side by a pale ochreous-brown band. Unh costal half brown, dorsal half brownish-white, with a submarginal macular dark band: a pale discal band and a bar end cell on the dark area. ♂ F 17 mm.

hampa nov: ♂ Santarem, Amazons: H. H. Smith: type B.M.
B.M. 2 ♂ 1 ♀ Santarem. 1 ♂ Tapajos, Amazons.

15. General appearance of *neivai*: genitalia as *limaea*. Hind tibiae with a single pair of spurs: ♂ with tuft. ♂ F 17 mm.

juxta Bell 1934: ♂ Peru, San Antonio: genitalia figured.
B.M. None. Unidentified or not in B.M.

E.42. SOSTRATA Godman & Salvin 1895: type *bifasciata* Ménétriés: fixed by Lindsey 1925 as *scintillans* Mabille which is a synonym of *bifasciata*.

A compact genus characterised by the chequered antennal shaft, the form of the genitalia and the presence of 4 apical spots F, when fully developed. Antennae = ½ costa: apiculus obtuse from beginning of nudum of 13 segments. Palpi rather long, porrect. ♂ with tibial tuft fitting into a thoracic pouch: costal fold usually present. Wings even, rounded. F cell short.

1a (7a). Unh blue.

1b (3a). Uph with 1 or 2 bright blue bands. ♂ no costal fold.

1 (2). Uph with a single broad blue band. Upf variegated, hyaline spots inconspicuous in ♂. Unh with few dark spots. ♂ F 16 mm.

cronion Felder 1867: ♀ Brazil: figured: type B.M. Fig Seitz: Hayward 1948, ♂ and genitalia.
B.M. 1 ♂ Venezuela. 1 ♂ Peru. 1 ♀ Pará. 1 ♂ 1 ♀ Minas Geraes. 1 ♀ Goyaz. 29 ♂ 18 ♀ S. Brazil (Rio. São Paulo. Espirito Santo. Petropolis. Novo Friborgo). 8 ♂ 2 ♀ Paraguay. 1 ♂ Argentine.

2 (1). Uph 2 blue bands. Upf powdered blue scales, hyaline spots conspicuous. Unh many black spots. ♂ F 16 mm.

festiva Erichson 1848: British Guiana. Fig in Seitz is of *Quadrus deyrollei.*

Synonym. *lucullea* Hewitson 1868: ♀ Amazons: type B.M. Fig Hewitson 1871: Seitz.

B.M. 4 ♂ 1 ♀ Colombia. 1 ♂ 1 ♀ Trinidad. 1 ♂ 6 ♀ Br Guiana. 3 ♂ Surinam. 8 ♂ 7 ♀ Fr Guiana. 7 ♂ 2 ♀ Peru (Tarapote. Amazonas. San Gaban. La Merced). 5 ♂ Bolivia (Songo. Coroico. Santa Cruz. Muschay). 14 ♂ 9 ♀ Amazons (Ega–Pará. R. Tapajos. R. Madeira).

3a (1b). Uph with faint blue bands formed of sparse scaling. ♂ with costal fold. Four very similar species.

3 (4a). Upf 2 conspicuous cell spots; lower one oblique; if present in allied species, it is faint. Uph with blue scaling at base, bar end cell and a narrow discal band (not a central band as in the other 3 species). Unf no submarginal blue spots. Unh blue colouring reaches termen from vein 5 to tornus. Cuiller of clasp expanded at tip, not spined. ♂ F 16 mm.

caerulans Mabille & Boullet 1916: ♂ Bolivia.

B.M. 3 ♂ Peru (Cuzco. La Merced. Chanchamayo). 2 ♂ Bolivia (La Paz).

4a (3). Upf lower cell spot absent or faint.

4 (5, 6). Cuiller of clasp curved inwards at tip and sharply pointed. Spots upf very small. ♂ F 17 mm.

adamantinus Mabille 1897: Bolivia. Fig Seitz.

B.M. 4 ♂ 1 ♀ Peru (Pozuzo. Huancabamba. Uruhasi. Marcapata). 2 ♂ Bolivia (San Jacinthe. Farinas, La Paz).

5 (4, 6). Cuiller of clasp straight, tapered, spined on inside near tip. Upf spots more strongly marked: those in space 2 tend to be conjoined. Below, submarginal blue spots usually conspicuous. ♂ F 16 mm.

grippa nov: ♂ E. Ecuador, Rio Verde, Rio Pastaza: 5,000 ft.: M. G. Palmer: type B.M.

B.M. 1 ♂ Colombia (Bogotá). 3 ♂ Ecuador (type loc). 1 ♂ 1 ♀ Ecuador (coll Hew as *lucullea*). 1 ♂ Bolivia.

6 (4, 5). Cuiller of clasp as in *grippa*, but shorter and broader, expanded inwards just above valva. Only differs superficially from *adamantinus* in having the dark apex unh broader. ♂ F 16 mm.

jinna nov: ♂ Colombia, Coreato, Cauca: Paine and Brinkley: type B.M.

B.M. 3 ♂ Colombia (type. San Antonio, W. Corderilla, 6,000 ft., A. H. Fassl. Ex coll Felder).

7a (1a). Unh not blue. ♂ with costal fold.

7 (8). Upf with more or less developed small hyaline spots and a sparse but conspicuous sprinkling of gleaming pale-blue scales outlining the spots as well as on the basal and apical dark bands. Uph with dark macular bands and up to mid wing strewn with pale-blue scales. ♂ F 15 mm.

bifasciata. 4 sub-species.

(a). Unh uniform pale brown with darker macular bands, not contrasting with unf.

Sub-sp. **nordica** nov: ♂ Mexico: type B.M.: figured by Godman & Salvin as *scintillans*.

B.M. 8 ♂ 8 ♀ Mexico. 8 ♂ 2 ♀ Guatemala. 1 ♂ Honduras. 1 ♀ Nicaragua. 10 ♂ 1 ♀ Costa Rica.

(b). Unh costal half black, dorsal half shining white, generally devoid of markings.

Sub-sp. **leucorrhoa** Godman & Salvin 1895: ♂ Panama: type B.M.

B.M. 6 ♂ 2 ♀ Panama. 3 ♂ 1 ♀ Colombia (Cauca. R. Dagua).

(c). Unh costal half dark brown, dorsal half yellowish-white of various shades, more or less dark spotted.

Sub-sp. **adamas** Plötz 1884: ♀ Brazil. Fig Seitz.

Synonym. *squamulatus* Plötz 1884.

B.M. 15 ♂ 4 ♀ Colombia. 23 ♂ 11 ♀ Venezuela. 11 ♂ 12 ♀ Trinidad. 1 ♂ 4 ♀ Surinam. 1 ♀ Ecuador. 2 ♂ 1 ♀ Ceara. 1 ♀ Goyaz.

(d). Unh light yellowish-brown with complete macular dark bands. Unf brown, contrasting with unh.

Sub-sp. **bifasciata** Ménétriés 1829: Brazil: figured.

Synonym. *scintillans* Mabille 1876: ♂ Guiana. Fig Seitz.

B.M. 1 ♂ Fr Guiana (small dark specimen). 1 ♀ Ecuador (Milayno). 1 ♂ Bolivia (Cochabamba). 1 ♂ Upper Amazons (Tapajos). 1 ♂ Pernambuco. 1 ♂ Bahia. 21 ♂ 16 ♀ S. Brazil (Rio. Paraná. São Paulo. Joinville. Petropolis. Espirito Santo). 2 ♂ 2 ♀ Paraguay. 1 ♀ Argentine.

8 (7). Upf with similar spots, but more or less obsolete: basal two-thirds sprinkled sparsely with shining pale blue scales. Smaller, ♂ F 12 mm.

pusilla. 3 sub-species.

(a). Unh uniform dark brown, the dark macular bands very faint or absent.

Sub-sp. **pusilla** Godman & Salvin 1895: ♂ Nicaragua: type B.M.: figured. Fig Seitz.

B.M. 3 ♂ Nicaragua. 3 ♂ Colombia. 2 ♂ Ecuador. 1 ♂ Peru (Loreto). 3 ♂ Amazons (Ega. Santarem. Pará).

(b). Unh dorsal half more or less white scaled, but bearing brown discal and submarginal spots.

Sub-sp. **manzanilla** Kaye 1940: ♂ Trinidad.

B.M. 1 ♂ Venezuela.

(c). Unh dorsal half shining white, unmarked, as in *leucorrhoa*.

Sub-sp. **pulsa** nov: ♂ Ecuador, Zamora: M. de Mathan 1891: type B.M.

B.M. Only the type.

E.43. PACHES Godman & Salvin 1895: type *loxus* Westwood: fixed by author.

A compact genus in respect of structure and genitalia, but displaying a great variation in facies. Wings rounded: dorsum sometimes concave and termen H may be sinuous. Antennae = ½ costa: shaft plain: club obtuse at thickest part, nudum 14. Palpi short, smooth. Hind tibiae with 2 pairs of spurs. ♂ no costal fold: hind tibiae with a hair tuft entering a thoracic pouch. Uncus always divided, also sometimes the gnathos: style of clasp long and slender.

1a (3a). ♂ uph, shining blue or purple. ♂ F 16 mm. ♀ brown.

1 (2). ♂ F dorsum straight: upf at least basal third shining blue or purple.

loxus. 4 sub-species.

(a). ♂ upf only the basal third blue or purple: outer two-thirds dark brown with an irregular, macular, blue discal band, often partly or entirely absent: uph no central dark band. ♀ uph with a broad, central, powdery grey band, extending to dorsal part of upf: unh powdered grey, leaving dark bands. ♂ F sometimes with a hyaline apical spot in space 8: ♀ usually also with smaller hyaline spots in spaces 6 and 7.

Sub-sp. **zonula** Mabille 1889: ♀ ? loc (probably Mexico): figured (very badly).

23 ♂ 6 ♀ Mexico. 34 ♂ 7 ♀ Guatemala. 8 ♂ 4 ♀ Honduras. 1 ♂ 1 ♀ Salvador. 9 ♂ 2 ♀ Nicaragua. 14 ♂ 2 ♀ Costa Rica.

(b). ♂ upf the blue basal area more extensive, often running into the dorsal half of the blue discal band, leaving a large dark spot at end of cell. ♀ uph the powdery grey central band narrower: unh tornally white. ♂ rarely, ♀ usually with apical hyaline spots F. Very variable. Palpi below, grey.

Sub-sp. **loxus** Westwood 1852: ♂ ? loc: figured, said to be from a specimen in coll Hewitson, none of which agrees with the figure: a B.M. specimen from Venezuela, agreeing exactly with the figure, and perhaps the real type, has been labelled as the neotype. Genitalia fig by Godman & Salvin.

Fig Seitz, ♂ badly, ♀ is *zonula*.

Synonyms. *subalbata* Plötz 1884: ♀ Colombia: copy of unpublished plate in B.M. Fig Seitz: Godman & Salvin, underside.

subornatus Mabille 1888: ♀ Panama: figured.

gloriosus Röber 1925: ♂ ? loc.

B.M. 25 ♂ 3 ♀ Panama. 33 ♂ 4 ♀ Colombia. 42 ♂ 13 ♀ Venezuela. 12 ♂ Ecuador (Loja. Zamora. La Chima. Ave Maria. Chimbo. Santa Rosa). 1 ♂ Porto Real, N. Brazil. 4 ♂ "Brazil".

(c). Intermediate to *gladiatus*. ♂ upf with a dark band, as in *gladiatus*, separating the blue discal band from the basal blue area: uph black central band absent or very faint, dark border broad and uniform. Blue and purple forms occur as in *loxus*.

Sub-sp. **loxana** nov: ♂ Bolivia, Buenavista: Steinbach: type B.M.

B.M. 3 ♂ Peru (Tarapote). 6 ♂ Bolivia (Buenavista. Santa Cruz). 11 ♂ Amazons (Teffe to Manaos).

(c). ♂ uph with a black central band, which continues across the blue forewing: no purple form. ♀ considerably different: upf no hyaline spots, brown with 3 dark bands, basal, central and marginal: uph with similar bands, but the base is entirely dark up to the central band, as may happen sometimes on upf. Below plain brown, no white area or grey scaling: unh paler, with traces of a dark discal band. Palpi below, brown.

Sub-sp. **gladiatus** Butler 1896: ♂ Pará: type B.M.: figured. Fig Seitz is *zonula*.

B.M. 3 ♂ "Panama" (probably Pará). 2 ♂ Peru (Cavallo Cocha). 9 ♂ Upper Amazons (S. Paulo de Olivenca. Ega. Tapajos. Rio Madeira). 38 ♂ 6 ♀ Pará.

2 (1). ♂ F dorsum concave: upf brown, except for some blue colouring on dorsal half of disc. Uph with a narrow powdery grey central band across the blue area. ♀ uph brown with a similar central band as well as another grey fainter band beyond it: upf discal area up to end of cell broadly grey scaled. Unh, ♂ and ♀, sparsely grey scaled, leaving dark bands. ♂ F with a hyaline spot in space 8: ♀ with hyaline spots also in spaces 6 and 7, and there may be a dot in space 1b, streak across space 2 and a dot in space 3.

polla Mabille 1888: ♂ Costa Rica: figured. Fig Seitz: Godman & Salvin.

B.M. 7 ♂ Mexico. 1 ♂ 1 ♀ Guatemala. 7 ♂ 3 ♀ Costa Rica.

3a (1a). Above no blue colouring.

3 (4a). Unh with a conspicuous tornal black spot. Above, dark brown with pale brown central, postdiscal and marginal bands, leaving dark, often macular, discal and submarginal bands: ♀ considerably paler. Unh pale brown with more or less distinct dark bands: ♀ pale yellow to nearly white, ♂ F usually with only a hyaline spot in space 8: one ♂ has a spot in space 2: ♀ has 3 apical

spots (largest in space 8), sometimes a spot in space 3: one ♀ has spots in spaces 2 and 3, as well as indications of 4 central pale spots, mid costa, 2 in cell and at base of space 2. Palpi grey or white, below. ♂ F 17 mm.

trifasciatus Lindsey 1925: ♂ Peru: figured, and genitalia. B.M. 2 ♂ 1 ♀ Peru (Chanchamayo. Yahuarmayo. Rio Colorado). 1 ♀ Bolivia (Buenavista). 5 ♂ Amazons (Iquitos).

4a (3). Unh no conspicuous black tornal spot.

4 (5). Above, unmarked dark shining brown: outwardly broadly rather paler. Below, paler silky brown: unh traces of dark discal and submarginal bands. Palpi below, yellowish-white and, above, there are some similarly coloured hairs on head and at end of the second palpal segment. ♂ F 16 mm.

era nov: ♂ Peru, Rio Pacaya, Lower Ucayali: Sept 1912: type B.M.

B.M. Only the type.

5 (4). Above, dark brown, upf apical half cinnamon-brown with large broken black markings, more continuous in ♀, where they are also apparent on uph. Below, paler brown, unmarked, but sometimes with a faint dark tornal spot unh. H termen sinuous. Palpi brown to grey. ♂ F 15 mm.

exosa Butler 1877: ♂ Amazons: type B.M.

Synonyms. *prudens* Plötz 1884: Surinam. Fig Seitz.
atrivirgula Mabille & Boullet 1917: ♂ Peru.
styx Lindsey 1925: ♂ Peru: figured, and genitalia.
B.M. 3 ♂ Fr Guiana. 4 ♂ 1 ♀ Peru (Tarapote. Amazonas). 2 ♂ Bolivia. 4 ♂ Amazons (Juhuty). 1 ♂ Matto Grosso.

E.44. HAEMACTIS Mabille 1903: type *sanguinalis* Westwood: sole species included.

Antennae = ½ costa: bent at beginning of the nudum (15 segments) and apiculus = unbent portion of club. F apex broadly truncate to vein 3. Hind tibiae with only a single pair of spurs. ♂ no costal fold: hind tibiae with a hair tuft fitting into a pouch at end of thorax. Above, black with a red border and red marking F: no hyaline spots.

1 (2). Unh more than half of the wing whitish, more or less reddened before the termen: the whitish area cut by dark veins. ♂ F 18 mm. Cuiller broad.

pyrrhosphenus Lindsey 1919: ♂ Muzo, Colombia.
B.M. 26 ♂ 1 ♀ Colombia (Bogotá. Cundinamarca. Santa Fé).

2 (1). Unh no whitish area, tornal quarter reddish, cut by black veins. Cuiller produced inwardly to a sharp point. ♂ F 17 mm.

sanguinalis Westwood 1852: ♂ Quito: type B.M. figured. Fig Seitz.
B.M. 2 ♂ Colombia. 4 ♂ Ecuador (Tirnatu. Quito). 36 ♂ 2 ♀ Peru (Rentema Falls. Huancabamba. Perene. Palcazu. Pozuzo. Chanchamayo. Marcapata). 5 ♂ Bolivia (Mapiri). 5 ♂ Upper Amazons (Iquitos. Nauta. San Mateo).

E.45. ATARNES Godman & Salvin 1897: type *sallei* Felder: sole species included.

♂ no costal fold: hind tibiae with a tibial tuft fitting into a pouch at end of thorax. Antennae as in *Haemactis*: nudum 15 segments. Above, veins outwardly white: broad central white band, inwardly flanked mid dorsum F by a large yellow spot. ♂ F 17 mm.

1 (2). Upf white band very much narrower than the large white area uph: apical spots present or absent. Unf yellow spot in space 1b present.

sallei Felder 1867: ♂ Mexico: type B.M.: figured. Fig Seitz: genitalia by Godman & Salvin.
Synonym. *angusteomarginata* Mabille & Boullet 1917: ♂ Nicaragua: a minor variety.
B.M. 29 ♂ 12 ♀ Mexico. 12 ♂ 2 ♀ Guatemala. 6 ♂ 1 ♀ Honduras. 11 ♂ 7 ♀ Costa Rica. 4 ♂ 2 ♀ Colombia.

2 (1). Upf and uph white areas sub-equal. Uph hyaline apical spots present. Unf no trace of the orange spot. Genitalia very different: gnathos absent: arms of uncus very long and slender.

hierax Hopffer 1874: ♂ N. Peru. Fig Staudinger 1888.

Synonym. *servatius* Plötz 1884. Fig Seitz.
B.M. 11 ♂ Peru (El Porvenir. Huancabamba. La Merced).

E.46. MILANION Godman & Salvin 1895: type *hemes* Cramer, fixed by authors.

Closely allied to *Paramimus*. Antenna has a nudum of 15 segments. Clasp without a style. Upf with hyaline white central and apical spots: uph with a broad white band. The genitalia indicate that there are 7 species, but superficially identification is difficult.

1a (6a). Upf with a discal white spot in space 1b.
1b (4a). Uph the white band of much the same width as the dark border.
1 (2a). Upf inner edge of the spot in space 1b in line with the inner edge of the spot in space 2 and usually conjoined thereto. Small, ♂ F 15 mm. Gnathos arms farther apart than the uncus arms: tips of uncus turned inwards. Abdomen above, centrally white, corresponding with band uph.

hemes. 3 sub-species.
(a). Upf spot in space 1b generally not reaching the spot in space 2, but, if so, it is constricted at its upper end: cell spot always wider than the apical spots. Cuiller of clasp long and thin, point turned inwards.

Sub-sp. **hemes** Cramer 1777: Surinam. Fig Seitz: fig by Hayward 1948 is of *pilumnus*.
Synonyms. *parvus* and *tenuis* Mabille & Boullet 1917: Trinidad and Fr Guiana. Varieties.
B.M. 1 ♂ 2 ♀ Venezuela. 14 ♂ 8 ♀ Trinidad. 4 ♂ 4 ♀ Br Guiana. 1 ♀ Surinam. 6 ♂ 5 ♀ Fr Guiana. 17 ♂ 25 ♀ Pará.
(b). Like *hemes* but the cuiller is shorter and the tip is twisted outwards.

Sub-sp. **pemba** nov: ♂ Peru, Amazonas, Cavallo-Cocho: July 1884: M. de Mathan: type B.M.
B.M. 2 ♂ Upper Amazons (Teffe. S. Paulo de Olivenca). 2 ♂ Peru (Amazonas. Maranon). 1 ♂ Bolivia.
(c). Upf the white spot in space 1b is always extended to the spot in space 2 and generally not reduced in width:

cell spot no larger than the apical spots and is often absent.

Sub-sp. **memba** nov: ♂ Nivac, Matto Grosso: type B.M.
B.M. 2 ♂ Goyaz. 4 ♂ 1 ♀ Matto Grosso.

2a (1). Upf the white spot in space 1b shifted slightly inwards and its inner edge not in line with the inner edge of the spot in space 2. Larger, ♂ F 16 mm. Gnathos arms as wide apart as the uncus arms: tips of uncus not turned in.

2 (3). Unh the white area reaches the costa and the base, where it is more or less shaded. Cuiller long and slender, tip turned outwards.

cramba nov: ♂ Peru, Rio Colorado, 2,500 ft.: April 1903: Watkins & Tomlinson: type B.M.
B.M. 7 ♂ Peru (Rio Colorado. La Merced. Amazonas). 1 ♂ 3 ♀ Upper Amazons (Teffe. Fonte Boa. Upper Putumayo. S. Paulo de Olivenca).

3 (2). Unh white area not reaching costa or base: the extreme base of the costa is narrowly white and is separated by a brown band from the central white area. Upf spot in space 1b small. Cuiller broad, rounded at end and with a central spine on the inner edge.

hemestinus Mabille & Boullet 1917: ♂ Upper Amazons.
B.M. 6 ♂ 2 ♀ Upper Amazons (Pebas. Iquitos. Ega. Teffe. S. Paulo de Olivenca). 6 ♂ 4 ♀ Pará. 1 ♂ "Rio".

4a (1b). Uph the white area twice as wide as the dark border.

4 (5). Upf spot in space 1b never larger than the cell spot and usually widely separated from the spot in space 2. Unh basal half of costa narrowly whitish followed by a brown shaded streak, recalling *hemestinus*. ♂ F 16 mm. Abdomen above, brown. Uncus arms shorter and closer together than in other species of the genus: gnathos arms wide apart at base, but curved towards the centre and ending under the uncus tips, blunt ended.

leucaspis Mabille 1878: ♀ Brazil: type B.M. Fig Hayward 1948, ♂ and genitalia.
B.M. 2 ♂ 1 ♀ Peru (Cuzco). 1 ♂ Bahia. 1 ♂ Matto Grosso.

1 ♀ Minas Geraes. 33 ♂ 26 ♀ S. Brazil (Paraná. São Paulo. Espirito Santo. Theresopolis). 15 ♂ 5 ♀ Paraguay. 1 ♂ 1 ♀ Argentine.

5 (4). Type ♂ upf spot in space 1b large, reaching the spot in space 2: cell spot absent: unh base shaded as in *hemes*: genitalia missing. A ♂ from Colombia is similar, but has a cell spot: its genitalia are figured here: uncus and gnathos arms sharply pointed, gnathos arms close together: cuiller broad ended with the tip turned over. 2 ♂ from Panama, without genitalia and 2 ♀ are placed here: they have the spot in space 1b small and a cell spot. ♂ F 15 mm.

marciana Godman & Salvin 1895: ♂ Panama: type B.M.: figured. Fig Seitz.
Synonym. *latior* Mabille & Boullet 1917; ♂ Colombia.
B.M. 3 ♂ 1 ♀ Panama. 1 ♂ 1 ♀ Colombia (Rio Magdalena).

6a (1a). Upf spot in space 1b absent or vestigial. Gnathos arms close together as in *marciana*.
6 (7). Unh costa broadly darkened, the white area reaching vein 7, above which there is a small detached white spot. Uph white band about as wide as the dark border. ♂ F 17 mm.

alaricus Plötz 1884: ♂ Bahia. Fig Seitz. Genitalia figured by Godman & Salvin, plate 87/1, under the name of *hemes* on the plate and *leucaspis* in the text, p. 403.
B.M. 6 ♂ 2 ♀ Brazil (Rio and without locality).

7 (6). Unh costa at base white followed by some obscure dark shading.

pilumnus. 3 sub-species.
(a). Uph white area very broad, 5 mm., and dark border only 1 mm. at dorsum. A dark ♀ (wet season form ?) is placed here tentatively: uph dark border 5 mm. and white band 2 mm. ♂ F 15 mm.

Sub-sp. **albidior** Mabille & Boullet 1917: ♂ Venezuela.
B.M. 2 ♂ 1 ♀ Venezuela.
(b). Like *pilumnus* but the spots upf are small as in *alaricus* and unf with no markings other than the hyaline spots. ♂ F 17 mm.

Sub-sp. **pilta** nov: ♂ Peru, Moyabamba: spring 1887: M. de Mathan: type B.M.
B.M. 7 ♂ Peru (Chanchamayo. Perene. Moyabamba).
(c). Upf resembles *leucaspis*, except for the spot in space 1b being absent. Uph white band at dorsum 5 mm. and dark border 2 mm. ♂ F 16–17 mm.
Sub-sp. **pilumnus** Mabille & Boullet 1917: ♂ Bolivia. Fig Hayward 1948, ♂ and genitalia as *hemes*.
B.M. 5 ♂ Peru (Chaquimayo. Cuzco. Marcapata). 3 ♂ 1 ♀ Bolivia.

E.47. PARAMIMUS Hübner 1819: type *scurra*. Hübner: fixed by Butler 1870.

♂ without a costal fold: hind tibiae with a long thin hair pencil fitting into a long double pouch at end of thorax: uph with few long hairs on vein 1a, beyond its centre. Antennae = ½ costa: club bent at beginning of the nudum of 12 segments: apiculus = unbent part of club. Upf no spot mid costa: uph with a white central band and middle of abdomen white. Aedoeagus slender: cuiller bifid: uncus and gnathos divided.

1 (2). End of abdomen, white striped. Upf no hyaline spot in cell: large red spot in space 1b, which extends across space 1a to dorsum. ♂ F 13 mm.
stigma. 2 sub-species.
(a). Upf ♂ ♀ with a conspicuous white hyaline spot in space 2 and an apical bar in spaces 6–8.
Sub-sp. **stanna** nov: ♂ Taboga Is., Panama: Champion: type B.M.
B.M. 19 ♂ 9 ♀ Panama (Taboga Is. Isle del Ray, Pearl Is. "Panama"). 1 ♂ Colombia (Santa Marta): variety of *stigma*.
(b). Upf ♂ the white spot in space 2 absent and the apical bar faint. ♀ as *stanna*.
Sub-sp. **stigma** Felder 1867: ♀ Colombia: type B.M.: figured. Fig Seitz: genitalia by Godman & Salvin.
Synonym. *monostigma* Godman & Salvin 1890: ♂ Santa Marta, Colombia: type B.M.
B.M. 13 ♂ 7 ♀ Colombia (Santa Marta. Magdalena Valley. Manaure. Lake Sapatoza). 2 ♂ 2 ♀ Venezuela.

2 (1). End abdomen black. Upf with a hyaline white cell spot. ♂ F 12 mm.

scurra. 2 sub-species.

(a). Upf the white spot in cell may extend across space 2, or be reduced to a small upper spot in the cell, or be absent: red spot in space 1b very small, or, more usually absent.

Sub-sp. **scurra** Hübner 1809: no loc.: figured. Fig Seitz.

Synonyms. *leucodesma* Erichson 1848: ♂ Br Guiana. Fig Seitz.

stigmoides, *latemaculatus*, *angusteomaculatus*, *evanescens* Mabille & Boullet 1917: Fr Guiana: varieties.

B.M. 6 ♂ 2 ♀ Br Guiana. 7 ♂ 5 ♀ Surinam. 23 ♂ 14 ♀ Fr Guiana. 37 ♂ 26 ♀ Lower Amazons (Pará. Santarem. Obidos). 1 ♂ Maranham.

(b). Upf markings larger: red spot in space 1b conspicuous, but not extending into space 1a. Uph white central band broader, as wide as the dark border.

Sub-sp. **herberti** Godman & Salvin 1896; ♂ Matto Grosso: type B.M.

B.M. 4 ♂ 1 ♀ type loc. 1 ♂ Upper Amazons (Itaituba–Obidos).

E.48. CHARIDIA Mabille 1903: type *lucaria* Hewitson, sole species included.

Differs from *Paramimus* and *Milanion* in the secondary sexual characters and the facies. ♂ hind tibia swollen and furnished with a recumbent brush along the tibia and an erectile tuft from the middle of the femur: no thoracic pouch or costal fold: the recumbent brush is absent in *empolaeus*. Upf with a conspicuous coloured spot mid costa.

1 (2). ♂ Upf black with a yellow spot mid costa and at tornus, and a postdiscal glazed area: uph black with a narrow submarginal yellow band. ♀ upf with a more or less developed hyaline band running from the yellow costal spot: uph with a pale area. ♂ F 14 mm.

lucaria. 4 sub-species.

(a). ♀ uph with the outer half of the wing white: inner edge of white area straight. Unh white up to the upper edge of the cell and vein 7, costa brown. ♂ unh as uph.

Sub-sp. **pilea** nov: ♀ Bogotá: type B.M.
B.M. 1 ♀ Colombia. 1 ♂ 2 ♀ without locality.
(b). ♀ uph the pale outer area narrow, much narrower than the dark basal area, inwardly irregularly edged. Unh as *pilea*. The pale area uph and unh usually yellow, sometimes white.

Sub-sp. **lucaria** Hewitson 1868: ♂ Cayenne: type B.M. Fig Hewitson 1871, ♂: Seitz ♂ ♀.
Synonym. *sulphurea* Mabille & Boullet 1917: ♀ Fr Guiana.
B.M. 2 ♂ 6 ♀ Br Guiana. 1 ♂ 2 ♀ Surinam. 1 ♂ 2 ♀ Fr Guiana. 3 ♂ 2 ♀ Amazons (Santarem. Ega. S. Paulo de Olivenca). 1 ♀ Maranham.
(c). ♀ uph as *pilea*: unh white to costa.

Sub-sp. **pocus** nov: Cuzco, Peru: type B.M.
B.M. 2 ♂ 2 ♀ Ecuador (Loja). 2 ♂ 2 ♀ Peru (Marcapata. Pachitea. Cuzco).
(d). ♂ unh with a large white area, narrowly bordered with brown along costa and termen.

Sub-sp. **mayo** nov: ♂ Chanchamayo, Peru: type B.M.
B.M. Only the type.

2 (1). ♂ ♀ black with a conspicuous red spot mid costa and at tornus, with a central white hyaline spot between them. Uph with a large central white area. ♂ F 18 mm.

empolaeus Westwood 1852: ♀ ? loc.: figured: type B.M. Fig Seitz.
B.M. 6 ♂ 1 ♀ S. Brazil (Paraná. São Paulo. Novo Friborgo).

E.49. POTOMANAXAS Lindsey 1925: type *flavofasciata* Hewitson: fixed by author.
Synonym. *Potomanax* Watson 1893: type *flavofasciata* Hewitson: fixed by author: homonym (Pilsbury 1892).

Antennae = ½ costa, arcuate from beginning of nudum (17 segments): apiculus as long as rest of club. ♂ no costal fold nor a tibial tuft: usually there is a hair tuft springing from below the vinculum on either side of the genitalia. F and H evenly convex: generally with a pale band across the wings. Superficially a compact genus: structurally *unifasciata* is abnormal in respect of the secondary sexual characters.

1 (2a). F with small hyaline spots. ♂ with a feebly marked costal fold: hair tuft on the hind tibia, entering a pouch at end of thorax. F vein 12 ends over end cell. Gnathos absent. ♂ F 18 mm. Above, with a broad white band from costa F to dorsum H.

unifasciata Felder 1867: ♂ Colombia: figured: type B.M. Fig in Seitz.
Synonym. *marica* Godman & Salvin 1895: ♂ Nicaragua: figured: type B.M. Fig Seitz.
B.M. 1 ♂ Costa Rica. 1 ♂ 1 ♀ Nicaragua. 9 ♂ Colombia. 8 ♂ Ecuador (Balzapamba. Paramba. Angamarca). 2 ♂ Peru (El Porvenir).

2a (1). F no hyaline spots and no secondary sexual characters. F vein 11 ends over end cell. Gnathos present.
2 (3a). Unh dark border reaching end of cell, which is defined by a white bar. Upf with compact yellow central band. Uph white costal area not extending below vein 7. ♂ F 18 mm.

flavofasciata. 2 sub-species.
(a). Upf no trace of paler markings on the dark apex: outer edge of central band even.
Sub-sp. **flavofasciata** Hewitson 1870: ♂ Ecuador: type B.M. Fig Hewitson 1875: Seitz.
B.M. 1 ♂ Ecuador. 8 ♂ Peru (Chanchamayo. Rio Colorado. La Merced).
(b). Upf with a postdiscal series of faint, pale brown spots from space 1c to apex: outer edge of central band more irregular.
Sub-sp. **pantra** nov: ♂ R. Songo to R. Suapi, Bolivia: 1,000 metres: April 1896: Garlepp: type B.M.
B.M. 8 ♂ Bolivia (R. Songo. Yungas, La Paz).

3a (2). Unh dark border not reaching end of cell, which is not marked by a pale bar.
3b (8a). Upf no pale detached spot in space 3 close to the central band.

3c (6a). Upf with some faint brown spots on the discal area between the central band and the termen, but not in the form of streaks between the dark veins.

3 (4a). ♀ above band orange and on uph continued by whitish scaling from mid space 1c to the tornus. ♂ F 17 mm.

xantholeuce Mabille 1888: ♀ Chiriqui: figured. Fig Seitz: Godman & Salvin from type.
B.M. None. ? colour variety of *thora*.

4a (3). Above, band white or very pale yellow.

4 (5). Uph band continued by white scaling from mid space 1c to tornus. ♂ F 15 mm. Inner face of cuiller straight and serrate.

thoria Hewitson 1870: ♂ Ecuador: type B.M.
Synonym. *pammenes* Godman & Salvin 1895: ♀ Nicaragua: figured: type B.M. Fig Seitz.
B.M. 1 ♀ Nicaragua. 1 ♀ Colombia. 1 ♂ 1 ♀ Ecuador (type. Balzapamba). 2 ♂ Peru (Chanchamayo. La Merced).

5 (4). Uph band ends sharply mid space 1c. ♂ F 17 mm. Inner face of cuiller pointed at each end.

melicertes Godman & Salvin 1895: Panama: figured. Fig Seitz.
B.M. 2 ♂ 3 ♀ Ecuador (No loc. Cachabe).

6a (3c). Upf discal area marked with pale streaks between the dark veins. Unh dark border generally narrow followed by small whitish spots before termen.

6 (7). Upf without a postdiscal dark band separating the pale discal streaks from a pale submarginal line. Style of clasp stout and pointed. ♂ F 17 mm.

hirta. 2 sub-species.
(a). Upf streaks central, not reaching the white (or pale yellow) central band or the termen: central band of even width. Uph central band narrow, reaching vein 1b. Upper end of cuiller tapered and rounded.

Sub-sp. **paphos** nov: ♂ Ecuador, Paramba: type B.M.
B.M. ♂ 1 Costa Rica. 2 ♂ 1 ♀ Colombia (Valdivia, Cundinamarca). 3 ♂ 2 ♀ Ecuador (Paramba).

(b). Upf discal streaks reaching termen: central band usually pale yellow, reducing to an inverted triangle at vein 1 and centrally broad. Uph white area broad, not extending below vein 4, but extended outwardly in spaces 6 and 7. Upper end of cuiller turned in and pointed.

Sub-sp. **hirta** Weeks 1901: Bolivia. Fig Weeks 1906.

Synonyms. *pisates* Druce 1912: ♂ Ecuador: figured: type B.M.

fassli Draudt 1922: Colombia: figured.

B.M. 5 ♂ Ecuador (Banos. Rio Pastaza. Loja. Santa Inez): 10 ♂ Bolivia (Yungas, La Paz. R. Songo).

7 (6). Upf with a dark, narrow postdiscal band separating the pale discal streaks from a pale, narrow submarginal line preceding the dark terminal line. Style of clasp widening, bifid at tip. ♂ F 17 mm.

effusa. 2 sub-species.

(a) Above, central yellowish band broken into narrow spots and more or less suffused.

Sub-sp. **effusa** Draudt 1922: Rio Negro: figured.

B.M. 1 ♂ 1 ♀ Fr. Guiana. 2 ♂ 2 ♀ Peru (Chaquimayo).

(b). Above, central white band broad and unbroken, as usual. Uph band short as in *hirta*.

Sub-sp. **confusa** Draudt 1922: Panama: figured.

B.M. 1 ♂ Colombia (Cundinamarca).

8a (3b). Upf with a pale detached spot in space 3 close to the central band, which is divided into spots by dark veins.

8b (10a). Upf spot mid space 1b as large as the spots above it of the central band and much larger than the streaks or spots in space 1b on either side of it. Uph white areas compact, not divided by dark veins. Unh dark border broad, not broken into spots, nor with any dark spots internal to it.

8 (9). Upf cell spot and spot in space 1b of the central band not longitudinally divided.

thestia. 3 sub-species.

(a). Upf like *thestia*, but central band narrower, spot in space 3 conspicuous, also the two outer spots in space 1b, but the spot near base of space 1b is faint. Uph central band very broad and reaching vein 1b: faint, small, pale brown discal spots, which appear unh as well-marked white spots. Cuiller straighter. Antennal club white in front. ♂ F 16 mm.

Sub-sp. **cranda** nov: ♂ Costa Rica: type B.M.
B.M. Only the type.
(b). Upf central band white, spot in space 3 faint as also are the discal spots: inner spot in space 1b yellow. Uph band not extending below vein 2. ♂ F 17 mm.

Sub-sp. **thestia** Hewitson 1870: ♂ Ecuador: type B.M. Fig Hewitson 1875: Seitz.
B.M. 2 ♂ Ecuador. 8 ♂ Peru (Chanchamayo. Pozuzo. Rio Colorado. R. Ucayali). 1 ♂ Bolivia (La Paz).
(c). Upf central band yellow, discal markings and spot in space 3 faint: inner spot in space 1b absent. Uph as *thestia*. ♂ F 18 mm.

Sub-sp. **paralus** Godman & Salvin 1895: ♂ Peru, Cosnipata: type B.M.: figured. Fig Seitz, ♂ only: ♀ is *latrea tusca*.
B.M. 14 ♂ Peru (Chaquimayo. San Gaban. Cosnipata. R. Inambari). 2 ♂ Bolivia.

9 (8). Upf cell spot and spot in space 1b longitudinally divided. Style of clasp long, curved and pointed.

latrea. 4 sub-species.
(a). Upf central band narrow and suffused lightly with brown scaling: spot in space 3 conspicuous: discal markings faint: inner spot in space 1b absent. Uph central white band continued to dorsum. ♂ F 19 mm.

Sub-sp. **latrea** Hewitson 1875: ♂ Nicaragua: figured: type B.M. Fig Seitz (very badly).
B.M. Only the type.
(b). Upf central band white, also spot in space 3: discal spots and inner spot in space 1b brownish: streak mid dorsum and spot at base of space 1b yellow. ♂ F 18 mm. Uph discal band to mid space 1c.

Sub-sp. **caliadne** Godman & Salvin 1895: ♂ Costa Rica: figured: type B.M. Fig Seitz (badly).
B.M. 4 ♂ Costa Rica.
(c). Upf all markings obscured, wing looking all black. Uph central band to vein 2. ♂ F 17 mm.

Sub-sp. **tusca** nov: ♂ Ecuador, Ambato: type B.M. Fig Seitz as *paralus* ♀.
B.M. 3 ♂ Ecuador (type loc.).
(d). Generally as *caliadne*, but uph discal band ends at vein 2. ♂ F 17 mm.
Sub-sp. **tyndarus** nov: ♂ Peru, Chanchamayo: type B.M.
B.M. 21 ♂ Peru (Chanchamayo. La Merced. Rio Inambari. Chaquimayo. Huancabamba. R. Perene. Amazonas). 1 ♂ "Bolivia".

10a (8b). Upf spot mid space 1b square or circular, conspicuous, but much smaller than the other discal spots, or than the streaks in space 1b exterior to it: cell spot divided longitudinally. Uph the white area generally not extending below the cell and is usually divided by dark veins. Unh with a dark cell spot, a discal row of small dark spots, a narrow submarginal dark band, followed by white spots and a black terminal line.
10 (11a). Upf spots in spaces 2, 3, 4 equally conspicuous and usually continued to the apical spots.
laoma. 6 sub-species.
(a). Entirely dusted brownish-grey, except for a conspicuous yellow spot mid space 1b upf and the yellow costal area uph, which is extended to space 1c by an inner and an outer row of small yellow spots. ♂ F 14 mm.
Sub-sp. **fumida** Draudt 1922: W. Colombia: figured.
B.M. None.
(b). Small brown form, ♂ F 13 mm. Upf with very reduced markings: both halves of the cell spot divided laterally before end of cell: apical spots and outer spots in space 1b absent. Uph streak in space 6 divided.
Sub-sp. **trex** nov: ♂ Ecuador: type B.M.
B.M. 6 ♂ Ecuador.
(c). Intermediate between *trex* and *violacea*. Clasp as in *violacea*. Upf cell spot crossed by a narrow zigzag line. Uph streak in space 6 not divided. ♂ F 14 mm.
Sub-sp. **laoma** Hewitson 1870: ♂ Ecuador: type B.M.
B.M. 10 ♂ Ecuador (R. Pastaza. R. Verde. Ambato).
(d). Clasp more slender, style long and straight. Above, as *laomo*, but uph streak in space 6 is divided as in *trex*:

unh discal band extends into space 6, also as in *trex*. ♂ F 15 mm.

Sub-sp. **trigga** nov: ♂ N. Peru, R. Tabaconas: 6,000 ft.: A. E. & F. Pratt 1912: type B.M.

B.M. 1 ♂ Ecuador (S. Francisco). 2 ♂ N. Peru (type loc. and Ayubaco Mts.).

(e). As *laoma*, but markings wider, particularly on uph, where the apical white area is usually not divided. ♂ F 15 mm.

Sub-sp. **violacea** Dognin 1888: ♂ Ecuador: type B.M. Fig Dognin 1891: Seitz.

B.M. 8 ♂ 2 ♀ Ecuador (Loja. Zamora). 20 ♂ Peru (Pozuzo. Huancabamba. Amazonas. Chanchamayo. Carabaya).

(f). Upf lower streak in cell not divided by a dark bar: spots in space 1b larger and yellower. Uph and unh as in *violacea*. Clasp much shorter. ♂ F 16 mm.

Sub-sp. **cosna** nov: ♂ Bolivia, Yungas, La Paz: 1,000 metres: H. Rolle: type B.M.

B.M. 7 ♂ Peru (Marcapata. Cuzco. R. Inambari). 30 ♂ Bolivia (Coroico. R. Songo. Cochabamba. R. Tanampaya. Yungas, La Paz).

11a (10). Upf spot in space 3 very much more conspicuous than the spot in space 4, which is faint or absent.

11 (12). Unf apical third mostly dark brown as in *laoma*. Upf upper streak in cell crossed by a dark bar as in *cosna*: more or less developed pale spots at base of cell and costa. Uph apical white area extended inwardly and outwardly to vein 2. ♂ F 17 mm.

frenda nov: ♂ Peru: type B.M.

B.M. 7 ♂ Peru (Huancabamba. Amazonas. R. Palcazu).

12 (11). Unf apical third much whiter. Upf cell streaks not divided laterally as a rule. Browner. ♂ F 18 mm.

andraemon. 3 sub-species.

(a). Upf dorsum below vein 1 brown: long yellow streak in space 4: outer streaks in space 1b brownish, conjoined. Uph apical white area only faintly perceptible in cell.

Sub-sp. **andraemon** Mabille 1897: ♂ Colombia: type B.M.

Synonym. *perornatus* Hayward 1940: ♂ Ecuador: genitalia figured.

B.M. 2 ♂ Colombia. 3 ♂ 1 ♀ Ecuador (Loja. Rio Pastaza. Ambato).

(b). Upf conspicuous yellow streak along dorsum: streak in space 4 absent: outer streaks in space 1b yellow and divided. Uph apical white area extends across cell and to vein 3.

Sub-sp. **fuma** nov: ♂ Huancabamba, Peru: type B.M.

B.M. 4 ♂ Peru (Huancabamba. Charape).

(c). Very like *fuma*. Upf with spots in spaces 3 and 4, but no apical spots: spot in space 3 overlaps spot in space 2: outer streaks in space 1b shorter: cell spots yellow, as well as all spots in space 1b and streak in space 1a. Uph as in *fuma*. Below, borders darker and more suffused.

Sub-sp. **forum** nov: ♂ Bolivia, Yungas, La Paz: 1,000 metres: H. Rolle: type B.M.

B.M. 1 ♂ Cuzco, Peru. 2 ♂ Bolivia.

E.50. MYLON Godman & Salvin 1894: type *lassia* Hewitson, fixed by author.

Synonym. *Eudamidas* Godman & Salvin 1895: type *menippus* Fabricius: fixed by Lindsey 1925 as *melander* Cramer, which is a synonym of *menippus*.

Wings more produced than in *Carrhenes* or *Potomanaxas*: apex F truncate. Antennae short, < ½ costa, bent at beginning of nudum (17–19 segments): apiculus longer than rest of club. There in a feeble costal fold in some species and in the first section the hind tibiae are provided with a tuft fitting in a pouch at the end of the thorax.

1a (8a). F with hyaline apical spots. Hind tibiae with a tuft entering a pouch on the thorax.

1b (6a). F less than 23 mm., termen concave just below the apex. Upf hyaline apical spots irregular. H with vein 1a <vein 8.

1c (4a). Uph and unh veins not darkened.

1d (3). Upf discal dark spots in 1b, 2 and 3 stepped, not overlapping.

1 (2). Uph discal band of dark spots separated from end

cell by at least the width of the band and from the submarginal band by a white band: thus a great deal more than half the wing is white. Lower fork of cuiller very wide. There appear to be 2 seasonal forms. *lassia*, ♂ F 18 mm., with the dark markings much reduced. *pulcherius* ♂ F 20 mm., much darker and bar at end cell uph always present. In Mexico *pulcherius* is predominant, while in Colombia to Trinidad *lassia* prevails.

lassia Hewitson 1868: ♀ Ecuador: type B.M. Fig Seitz: Godman & Salvin, ♂ and genitalia from Mexico.
Synonyms. *pulcherius* Felder 1869: ♂ Mexico: type B.M. Fig in Seitz is *zephus*: figs by Godman & Salvin 1895 and Hayward 1948, of ♂ and genitalia are *salvia*.
parvus Mabille & Boullet 1917: ♂ Venezuela.
B.M. 27 ♂ 7 ♀ Mexico. 22 ♂ 5 ♀ Guatemala. 3 ♂ Nicaragua. 13 ♂ 1 ♀ Costa Rica. 9 ♂ 1 ♀ Panama. 11 ♂ 1 ♀ Colombia. 2 ♀ Venezuela. 7 ♂ 2 ♀ Trinidad.

2 (1). Uph discal band of dark spots nearly reaches the dark bar at end of cell: the white band separating the discal and submarginal dark bands is smoky, thus less than half the wing is white. Upper and lower forks of the cuiller narrow and pointed.

zephus. 2 sub-species.
(a). Smaller, ♂ F 19 mm. Above, pale areas smoky grey.
Sub-sp. **zephus** Butler 1870: ♀ Venezuela: type B.M. Fig Seitz as *pulcherius*.
Synonym. *puncticornis* Strand 1920: ♂ Colombia.
B.M. 2 ♂ Mexico (coll Felder). 26 ♂ 3 ♀ Colombia. 6 ♂ Venezuela.
(b). Larger, ♂ F 21 mm. Above white areas clear.
Sub-sp. **albodiscus** Mabille & Boullet: ♂ Bolivia.
B.M. 34 ♂ Peru (Huancabamba. Chanchamayo. Pozuzo. Carabaya. Marcapata. Uruhassi). 7 ♂ Bolivia.

3 (1d). Upf discal dark spots in spaces 1b, 2 and 3 in line, not stepped. Uph white area as in typical *lassia*, but no dark bar at end of cell. End of cuiller rectangular, not rounded as in rest of group.

illineatus. 2 sub-species.
(a). ♂ F 18 mm. Above, no white zigzag line before the

black terminal line. Uph dark discal spot in space 6 small and faint.

Sub-sp. **illineatus** Mabille & Boullet 1917: ♂ ? loc. Fig Hayward 1948, ♂ and genitalia.
B.M. 8 ♂ Ecuador (Quito. Archidona. Zamora). 25 ♂ 1 ♀ Peru (Chanchamayo. San Gaban. Chaquimayo. Carabaya. Cosnipata. Palcazu). 10 ♂ Bolivia (Mapiri. Yungas, La Paz).
(b). ♂ F 19 mm. Above, with a conspicuous zigzag white line before the terminal dark line. Uph with violet scaling on the sub-basal dark band and below the hyaline apical spots. Uph dark discal spot in space 6 as conspicuous as the other spots.

Sub-sp. **toxina** nov: ♂ Florida, Upper Putumayo: type B.M.
B.M. 13 ♂ 4 ♀ Upper Amazons (Iquitos, S. Paulo de Olivenca. Pebas. Upper Putumayo).

4a (1c). Uph and unh veins on outer half of wing conspicuously darkened. Uph dark discal band continuous rather than macular.
4 (5). Uph no dark bar at end of cell and central area broadly white, as in *lassia*. Upf exactly as *zephus albodiscus*: unh also, but the discal dark band is a narrow line, well separated from the dark submarginal area and linked to it by dark veins. ♂ F 21 mm.

orsa nov: ♂ Costa Rica, Cache: D. Rogers: type B.M.
B.M. 1 ♂ 2 ♀ Costa Rica.

5 (4). Uph with a dark bar at end of cell: central white area narrow, as in *zephus*, and smoky grey, both on uph and upf. Upf very like *cajus*. Below, as *orsa*. Clasp very like that of *orsa*, but the general appearance is very different. ♂ F 22 mm.

mestor nov: ♂ Ecuador (coll Hewitson): type B.M.
B.M. Only the type.

6a (1b). ♂ F 23 mm. or more. F not concave below apex and wings more produced: H vein 1a longer than vein 8. ♂ with a vestigial costal fold. Upf apical spots in line. Unh veins dark beyond the discal band.
6 (7). Uph a faint dark bar at end of cell and vein 5

darkened up to the discal band. Unf dark discal band continued to vein 1 as on upf. Cuiller broad, rounded at end. ♂ F 25 mm.

salvia nov: ♂ Bugaba, Panama; 1,000 ft.: Champion: type B.M.: figured by Godman & Salvin, plate 85/11–13 as *pulcherius*. Fig Hayward 1948, ♂ and genitalia as *pulcherius*.

B.M. 1 ♂ Mexico. 1 ♂ Guatemala. 1 ♂ Costa Rica. 1 ♂ Panama. 5 ♂ Colombia.

7 (6). Uph no dark bar at end cell and vein 5 not darkened between end cell and the discal band. Unf dark discal band not continued below vein 3. Cuiller narrow, bluntly pointed at end. ♂ F 23 mm. Very like *menippus* with which it has been confused.

ander nov. 2 sub-species.

(a). F apical spots only hyaline. Uph and unh dark discal band does not extend beyond vein 6.

Sub-sp. **andrea** nov: ♂ Colombia: type B.M.

B.M. 1 ♂ Colombia. 1 ♀ "Brazil".

(b). F also with hyaline dots on the dark discal band above veins 1 and 2 and a narrow streak across space 3. Uph and unh dark discal band continued into space 6, as in *menippus*.

Sub-sp. **ander** nov: ♂ Rio: Mrs. Smith 1870: type B.M. 1 ♂ Upper Amazons (Ega). 3 ♂ Peru (Chanchamayo. Ucayali. Carabaya). 6 ♂ Bolivia (Yungas, La Paz. Buenavista. Sara, Santa Cruz). 2 ♂ Goyaz. 2 ♂ Minas Geraes. 10 ♂ 5 ♀ S. Brazil (Rio. São Paulo. Espirito Santo. Santa Catharina. Petropolis. Theresopolis).

8a (1a). F without hyaline spots. Hind tibia without a hair pencil.

8b (10a). F termen slightly concave before apex. Uph no bar at end of cell.

8 (9). Upf with a dark bar, usually pale centred, across cell mid-way between the dark basal area and end of cell. ♂ F 22 mm.

menippus Fabricius 1776: Surinam.

Synonyms. *melander* Cramer 1782: Surinam: figured. Fig Seitz: ♂ and genitalia by Godman & Salvin and

Hayward 1948. *albescens* Mabille & Boullet 1917: ♂ Venezuela.
B.M. 7 ♂ Mexico. 5 ♂ 2 ♀ Guatemala. 1 ♀ Honduras. 1 ♂ Salvador. 13 ♂ 1 ♀ Nicaragua. 11 ♂ 5 ♀ Costa Rica. 4 ♂ 2 ♀ Panama. 22 ♂ 2 ♀ Colombia. 5 ♂ 1 ♀ Venezuela. 2 ♂ 2 ♀ Trinidad. 1 ♂ 1 ♀ Br Guiana. 1 ♂ 2 ♀ Fr Guiana. 10 ♂ Ecuador (Loja. Paramba. Archidona). 17 ♂ 1 ♀ Peru (Chanchamayo. Tarapote. San Gaban. Marcapata). 10 ♂ Bolivia (Buenavista. Santa Cruz. Yungas, La Paz. Muschay). 3 ♂ 2 ♀ Upper Amazons (Iquitos. Teffe. Pebas). 3 ♂ 1 ♀ Pará. 2 ♂ 2 ♀ Bahia. 1 ♂ 1 ♀ Maranham. 1 ♂ 1 ♀ Goyaz. 4 ♂ Matto Grosso. 20 ♂ 5 ♀ S. Brazil (Rio. São Paulo. Paraná). 17 ♂ 3 ♀ Paraguay. 5 ♂ Argentine.

9 (8). Upf no dark bar across cell. ♂ F 23 mm.
cajus. 2 sub-species.
(a). Uph central area broadly immaculate white.
Sub-sp. **hera** nov: ♂ Panama: type B.M.
B.M. 1 ♂ Guatemala. 1 ♂ Costa Rica. 2 ♂ 2 ♀ "Peru".
(b). Uph central pale area narrower, more or less sullied with brown and crossed by dark veins.
Sub-sp. **cajus** Plötz 1884: Peru. Fig Seitz.
Synonym. *obscurior* Schaus 1902: Peru.
B.M. 11 ♂ Colombia. 4 ♂ Venezuela. 16 ♂ Ecuador (Rio Pastaza. Zamora. Ambato. Loja). 36 ♂ Peru (Chanchamayo. Huancabamba. Carabaya. Amazonas. Chaquimayo. Cosnipata. Marcapata. Moyabamba). 21 ♂ Bolivia (Coroico. Yungas, La Paz. Cochabamba. Mapiri. Apalobamba). 1 ♀ Rio.

10a (8b). F termen not concave below apex. Uph dark bar at end cell. Wings more elongate. ♂ 21 mm.
10 (11). F dark bar end cell directed to the outer edge of the discal dark spot in space 1b. Cuiller long, narrow and tapered.
pelopidas Fabricius 1793: Indiis: figured Jones Icones.
Synonyms. *ozema* Butler 1870: ♂ Nicaragua: type B.M. Fig Godman & Salvin, ♂ and genitalia: Seitz.
brunnea Mabille & Boullet 1917: ♂ Mexico.
B.M. 34 ♂ 8 ♀ Mexico. 9 ♂ 1 ♀ Guatemala. 4 ♂ 2 ♀

Honduras. 1 ♂ Salvador. 7 ♂ 1 ♀ Nicaragua. 1 ♂ Costa Rica. 8 ♂ 1 ♀ Panama. 3 ♂ 3 ♀ Colombia. 6 ♂ 1 ♀ Venezuela. 4 ♂ 4 ♀ Trinidad. 1 ♂ Br Guiana. 13 ♂ 3 ♀ Upper Amazons (Iquitos. Tapajos. Tonantins. Ega. S. Paulo de Olivenca). 1 ♂ Pernambuco. 1 ♂ Goyaz. 1 ♂ Matto Grosso. 1 ♀ Rio. 5 ♂ São Paulo. 5 ♂ Paraguay.

11 (10). F dark bar end cell directed to middle or inner edge of the spot in space 1b. Cuiller short, broad, rounded at end.

jason Ehrman 1907: Venezuela. Fig Hayward 1948, ♂ and genitalia.

Synonym. *exstincta* Mabille & Boullet 1917: ♂ Amazons.
B.M. 1 ♂ Guatemala. 1 ♂ Honduras. 2 ♂ Nicaragua. 1 ♂ Panama. 3 ♂ Colombia. 5 ♂ Venezuela. 1 ♀ Trinidad. 1 ♂ Br Guiana. 1 ♂ Surinam. 1 ♂ Ecuador (St Inez). 1 ♂ Peru. (Ucayali). 1 ♀ Bolivia (Buenavista). 3 ♂ Upper Amazons (Iquitos. S. Paulo de Olivenca). 2 ♂ 1 ♀ Maranham. 1 ♂ 2 ♀ Bahia. 10 ♂ Matto Grosso. 1 ♂ Paraguay.

E.51. CARRHENES Godman & Salvin 1895: type *fuscescens* Mabille: fixed by authors.

Wings rounded. Antennae = ½ costa: club bent at the beginning of the nudum of 15–18 segments: apiculus > rest of club. ♂ with a costal fold F, as well as a hair pencil on the hind tibiae fitting into a pouch on the thorax.

1 (2a). Upf with a double hyaline spot mid costa, in spaces 10 and 11. Unh generally with a tornal black spot. Clasp with a very large style, larger than the cuiller: end of uncus broad: aedoeagus with a short spine on the left just above the vinculum. H excavate in spaces 4 and 5.

fuscescens. 5 sub-species.

(a). Above, uniform dark brown with very few hyaline spots: 2 small spots in space 2: lower cell spot absent. Below, paler, yellowish-brown. ♂ F 17 mm.

Sub-sp. **fuscescens** Mabille 1891: ♂ Honduras: type B.M. Fig Seitz: Godman & Salvin, ♂ and genitalia.
B.M. 5 ♂ Mexico. 4 ♂ Guatemala. 4 ♂ Honduras. 1 ♂ 1 ♀ Nicaragua.

(b). Above, very similar, but with an indication of the pale central areas, conspicuous in the subsequent sub-species: single crescentic spot in space 2. Unh, and more or less unf, whitened. ♂ F 18 mm.

Sub-sp. **calidius** Godman & Salvin 1895: ♂ Mexico: type B.M.: figured. Fig Seitz.

Synonym. *callierges* Mabille & Boullet 1917: ♂ Colombia: type B.M.

B.M. 4 ♂ Mexico. 4 ♂ Guatemala. 1 ♂ Honduras. 1 ♂ 1 ♀ Nicaragua. 2 ♂ 1 ♀ Costa Rica. 2 ♂ Panama. 3 ♂ Colombia. 3 ♂ 1 ♀ Venezuela. 1 ♂ Ecuador (Paramba). 1 ♂ Amazons. 1 ♂ Bolivia (San José).

(c). Above variegated with paler central areas: upf with 2 cell spots, often united: a hyaline spot under the cell spot at base of space 2. The pale central area smoky: submarginal dark band narrow and macular, outwardly bordered by a pale band of the same width, before the dark terminal line. Unh white with dark markings extending to the costa. ♂ F 16 mm.

Sub-sp. **conia** nov: ♂ Fr Guiana: type B.M.

B.M. 1 ♂ 2 ♀ Fr Guiana. 7 ♂ Amazons (Putumayo to Santarem).

(d). Large, pale form, ♂ F 19 mm. Above, central pale areas white. Uph bands more regular, discal and submarginal bands closer together, separated by a band of white spots. Unh white, markings pale brown, becoming obsolete on upper half of wing. Bolivian specimens tend to be intermediate to *chaeremon*.

Sub-sp. **bamba** nov: ♂ Peru, Chanchamayo: type B.M.

B.M. 3 ♂ 1 ♀ Ecuador (Loja. Zamora). 17 ♂ Peru (Moyabamba. Chanchamayo. La Merced. Rio Colorado. Tarapote. Monte Rica. Carabaya. San Remon). 26 ♂ 1 ♀ Bolivia (Cochabamba. Yungas, La Paz. Santa Cruz. Tanampaya).

(e). A form intermediate between *bamba* and *conia*. ♂ F 18 mm. Upf markings much reduced. Uph with a broad, dark border.

Sub-sp. **chaeremon** Mabille 1891: ♂ Brazil. Fig Seitz.

B.M. 4 ♂ Minas Geraes. 3 ♂ Espirito Santo. 1 ♂ Rio.

2a (1). Upf no hyaline spot mid costa in space 10. Clasp with the style very much smaller than the cuiller: bifid uncus tapered to 2 points: aedoeagus without a spine. H only faintly concave in spaces 4 and 5.

2b (4). Unh no tornal dark spot.

2 (3). Above, greyish-brown to white. Clasp with the style undivided and turned inwards: uncus tips divergent. ♂ F 17 mm.

canescens. 3 sub-species, which are very variable and seem to have 2 seasonal forms.

(a). Usual form, above, grey-brown, uniform: below, pale brown. A whitened form (typical *canescens*) also occurs. Clasp with turned in tip of cuiller short: style long.

Sub-sp. **canescens** Felder 1869: ♂ Mexico: type B.M. Fig Godman & Salvin ♂: Seitz: figs by Hayward 1948 appear to represent a dark form of *pallida*.

B.M. 36 ♂ 9 ♀ Mexico. 12 ♂ 6 ♀ Guatemala. 1 ♂ Salvador. 4 ♂ 1 ♀ Nicaragua. 4 ♂ 5 ♀ Costa Rica. 6 ♂ 2 ♀ Panama.

(b) Usual form variegated: apical half F pale brown: H mostly pale brown. A whitened form also occurs. Genitalia as *canescens*.

Sub-sp. **leada** Butler 1860: ♀ Venezuela: type B.M. Fig Godman & Salvin ♂ and genitalia: Seitz.

B.M. 7 ♂ 1 ♀ Colombia. 4 ♂ 4 ♀ Venezuela. 1 ♂ Surinam. 4 ♂ 1 ♀ Ecuador (Loja). 4 ♂ Bolivia (Reyes. Santa Cruz). 4 ♂ Amazons. 2 ♂ Matto Grosso.

(c). Paler than *leada*: whitened form more frequent. Clasp with the turned in tip of the cuiller much longer, but the style is short and bulbous.

Sub-sp. **pallida** Röber 1925: ♂ Rio Grande do Sul. Fig Hayward 1948, ♂ and genitalia of dark form as *canescens*. Synonym. *lilloi* Hayward 1946: ♂ Ecuador, Macas, Rio Upano (and 9 ♂ paratypes from Argentine): figured Argentine paratype. Fig Hayward 1948, ♂ and genitalia of pale form.

B.M. 1 ♂ Minas Geraes. 8 ♂ 8 ♀ S. Brazil (Paraná. São Paulo). 14 ♂ 3 ♀ Paraguay. 1 ♂ Argentine (paratype of *lilloi*).

3 (2). Above, much darker ochreous-brown, rendering the small hyaline spots F much more conspicuous. Clasp with the style bifid, the outer longer arm turned outwards: uncus tips convergent. ♂ F 17 mm.

callipetes. 2 sub-species.

(a). Unh ochreous-brown, rather paler than above.

Sub-sp. **callipetes** Godman & Salvin 1895: ♂ Mexico: type B.M.: figured ♂ and genitalia. Fig Seitz.

B.M. 7 ♂ 3 ♀ Mexico. 7 ♂ Guatemala.

(b). Unh more or less whitened and often with a bluish gloss.

Sub-sp. **meridensis** Godman & Salvin 1895: ♂ Costa Rica: type B.M.: figured. Fig Seitz.

B.M. 2 ♂ Costa Rica. 1 ♂ 1 ♀ Panama. 7 ♂ 1 ♀ Colombia. 4 ♂ Venezuela.

4 (2b). Unh with a large black tornal spot. Above, dark brown with a purple gloss: hyaline spots F minute or absent. Uph costa narrowly white above vein 8. Unh paler brown with the usual dark spots. Clasp with the cuiller curved, not bent inwards: style divided, inner arm the longer. ♂ F 18 mm.

santes Bell 1940: ♂ Rio Santiago, Peru: figure of genitalia. Synonym. *aquila* Hayward 1950: ♂ Bolivia: genitalia figured.

B.M. 1 ♂ Peru (Monte Rico). 1 ♀ Santarem.

E.52. CLITO Evans (p. 16). type *clito* Fabricius: fixed by author.

A compact genus characterised by the spined mid tibiae, the form of the antennal apiculus and the facies, with conspicuous hyaline spots upf and more or less of a white area uph. Antennae $< \frac{1}{2}$ costa: shaft more or less chequered: curved to the apiculus shortly after the beginning of the nudum, 3/13: apiculus much longer than the club. Palpi short = head. Wings produced: H vein 1a > vein 8. ♂ with a costal fold: no tibial tuft. Uncus tapered, undivided: aedoeagus with a conspicuously long sheath.

1a (5a). Upf inner edges of cell spot and spot in space 2 in line.

1 (2a). Upf hyaline spots in space 2 and the cell each consist of two narrow hyaline lines, which may be inwardly connected U or V-wise. ♂ F 17 mm.

littera. 3 sub-species.

(a). Uph with a broad white discal area as in *clito*. Upf the double spots in space 2 and cell connected.

Sub-sp. **anda** nov: ♂ Fr Guiana: G. Bar: type B.M.
B.M. 2 ♂ Fr Guiana.

(b). Uph white area absent. Upf the double spots connected.

Sub-sp. **littera** Mabille 1877: ♂ Peru, Aporimac Valley: type B.M. The figures in Seitz are of *Telemiades penidas*.
B.M. Only the type.

(c). Uph no white area. Upf the double spots not connected.

Sub-sp. **nebulosa** Draudt 1924: ♂ Bolivia, Songo: figured.
B.M. None.

2a (1). Upf without such double spots. Uph with white area.

2 (3a). Uph with a sordid white central band, narrower than the dark basal and outer areas. ♂ F 14 mm.

bibulus Riley 1929: ♂ Chapada, Matto Grosso: type B.M.
Synonym. *maculata* Bell 1938: ♂ Matto Grosso: genitalia figured.
B.M. 3 ♂ 1 ♀ Goyaz. 10 ♂ 1 ♀ Matto Grosso.

3a (2). Uph with a white central area at least as broad as the dark areas.

3 (4). Upf spot in space 3 completely detached, mid spots in spaces 2 and 4. ♂ F 16 mm.

clito Fabricius 1787: Cayenne. Fig Butler 1869. Fig in Seitz is of *sompa*.
Synonym. *aberrans* Draudt 1924: ♂ Teffe: figured.
B.M. 1 ♀ Guatemala. 1 ♂ 1 ♀ Br Guiana. 3 ♂ 2 ♀ Fr Guiana. 3 ♂ Upper Amazons (R. Negro. Ega. Tapajos). 7 ♂ 12 ♀ Pará. 1 ♀ Pernambuco. 1 ♀ Matto Grosso. 1 ♀ Rio.

4 (3). Upf spot in space 3 overlaps the spot in space 2. Uph dark border variegated: central white area very wide. ♂ F 15 mm.

sompa nov: ♂ S. Antonio da Barra, Bahia: Ch. Pujol: type B.M. Fig Seitz as *clito*.
B.M. 1 ♂ Pará. 1 ♂ Bahia.

5a (1a). Upf inner edge of spot in space 2 more in line with the outer than the inner edge of the spot in the cell.
5 (6a). ♂ uph white area reaching the termen and the tornus. ♂ F 14 mm.

zelotes Hewitson 1873: ♂ Amazons: type B.M.: figured. Fig Seitz.
B.M. 2 ♂ Fr Guiana. 3 ♂ Up Amazons.

6a (5). Uph white area not reaching termen or tornus.
6 (7). ♂ uph central white band comparatively narrow and sullied: outer border variegated as in *bibulus*. Unh white area reaches costa. ♂ F 14 mm.

zenda nov: ♂ Surinam: type B.M.
B.M. 1 ♂ Surinam. 1 ♀ Fr Guiana. 1 ♀ Rio.

7 (6). ♂ uph white area clear and very broad: outer border broad and dark, not variegated. Unf the hyaline spot in space 1b followed by a sharply marked double spot. Unh white area not extending above vein 8. ♂ F 16 mm.

tuva nov: ♂ Pará: type B.M.
B.M. 2 ♂ 1 ♀ Pará.

E.53. XENOPHANES Godman & Salvin 1895: type *tryxus* Stoll fixed by authors.

Antennae = ½ costa: shaft chequered: arcuate from beginning of nudum, 16 segments: apiculus = rest of club. Palpi short = head, white below. Wings not produced: F excavate in space 1b: H in space 4–5 and slightly crenulate elsewhere, vein 1a = vein 8. ♂ no costal fold: hind tibiae with a tuft fitting into a thoracic pouch. Uncus divided at tip: clasps somewhat asymmetric and variable, the small style present or absent.

Single species. ♂ F 14 to 16 mm. Grey above, white below, with hyaline spots on both wings. But there is considerable variation in the colouring above, from dark brown to nearly white, also in the development of the hyaline spots and the dark spots unh.

tryxus Stoll 1780: Surinam: figured. Fig Hübner: Seitz: Holland: Godman & Salvin, with genitalia: Lindsey, etc., genitalia: Hayward 1948, ♂ and genitalia.

Synonyms. *salvianus* Fabricius 1793: Indiis: fig Jones Icones.

ruatensis Godman & Salvin 1895: ♂ Ruatan Is., Honduras: type B.M. Dark island form.

euphemie Ehrman 1907: Venezuela.

perplexus Bell 1942: ♂ Guerrero: genitalia figured. An aberration without hyaline spots.

B.M. 26 ♂ 12 ♀ Mexico. 13 ♂ 5 ♀ Guatemala. 7 ♂ 1 ♀ Honduras. 2 ♂ Ruatan Is. 1 ♂ Salvador. 5 ♂ 3 ♀ Nicaragua. 10 ♂ 2 ♀ Costa Rica. 12 ♂ 2 ♀ Panama. 10 ♂ 4 ♀ Colombia. 15 ♂ 3 ♀ Venezuela. 9 ♂ 3 ♀ Trinidad. 8 ♂ 3 ♀ Br Guiana. 10 ♂ Surinam. 6 ♂ 6 ♀ Fr Guiana. 7 ♂ 3 ♀ Ecuador. 10 ♂ 2 ♀ Peru. 9 ♂ 1 ♀ Bolivia. 17 ♂ 10 ♀ Amazons. 1 ♀ Maranham. 1 ♂ Pernambuco. 2 ♂ Bahia. 2 ♂ Ceara. 2 ♂ Matto Grosso. 13 ♂ 9 ♀ S. Brazil. 6 ♂ 4 ♀ Paraguay. 4 ♂ 2 ♀ Argentine.

E.54. ONENSES Godman & Salvin 1895: type *hyalophora* Felder: sole species included.

Characterised by the extensive hyaline areas on both wings, which are produced and are irregular. F toothed at end of vein 3, concave above and below that point and along dorsum: H toothed at ends of veins 6 and 3, concave in between and below apex as well as before tornus. Antennae $< \frac{1}{2}$ costa: bent at beginning of nudum of 16 segments: apiculus = rest of club: shaft chequered. Palpi short. Uncus divided. ♂ no costal fold: with a tuft on the hind tibiae entering a thoracic pouch.

1 (2). H cell much $> \frac{1}{2}$ wing. Greenish-brown with large hyaline spots upf and a large triangular central area uph. ♂ F 18 mm.

hyalophora Felder 1869: ♂ Orizaba. Fig Godman & Salvin, ♂ and genitalia: Seitz.

B.M. 17 ♂ Mexico. 4 ♂ Guatemala.

2 (1). H cell $= \frac{1}{2}$ wing. Antennal nudum 18. Palpi, third segment rather long and black. H tibiae, single, short upper spur. ♀ F 18 mm. Angulation much less pronounced. Above, white with broad (4 mm.) black bases. Upf apex broadly black to vein 2 : centrally hyaline from costa to vein 2: small hyaline spots on the black apex in spaces 3, 6 and 7: 2 discal hyaline spots on the white area in space 1b: some thin grey scaling at end of cell, beyond the apical spots and along the termen. Uph centrally hyaline, outwardly white: black edged hyaline spots in spaces 1c, 2 and 3: faint dark spot mid space 7. Unf basal black area obsolete: black apex browner. Unh no basal dark area: tornal third pale brown, running as a submarginal line to the apex. Cilia H white chequered at ends of veins 2 and 3: F brown, faintly white in space 1b. Bears a superficial resemblance to *Diaeus lacaena varna* and even more to the S. African species *Netrobalane canopus*.

kelso nov: ♀ British Guiana, Carimang River: H. Whiteley: type B.M.
B.M. Only the type.

E.55. ANTIGONUS Hübner 1819: type *erosus* Hübner: sole valid species included.
Synonym. *Chaetoneura* Felder 1862: type *nearchus* Latreille: diagnosis based on *hippalus* Felder, a synonym of *nearchus*.

A variegated genus of species resembling each other more or less in wing shape and form of genitalia. F dorsum concave: H typically concave at apex and toothed at ends of spaces 3 and 6. Antennae < $\frac{1}{2}$ costa: shaft more or less chequered: apiculus = rest of club: nudum variable. Palpi = head, porrect. Males mostly with a costal fold: all have a tibial tuft entering a thoracic pouch. Uncus divided: clasp with a long style.

1a (5a). Antennal apiculus long, slender, pointed: nudum of 18 or more segments. ♂ with costal fold.
1 (2a). F no hyaline spots. ♂ apex F produced: falcate in ♀: H with long tooth at end of space 6. Above varying from a dark uniform form to a pale tawny, very variegated form. ♂ F 23 mm. Nudum of 23 segments.

nearchus Latreille 1824: ♂ S. America: type B.M. Fig Seitz: Godman & Salvin, genitalia: Hayward 1948, ♂ and genitalia.
Synonyms. *ustus* Geyer 1832: ♂ Brazil: figured.
pausus Westwood 1852: ♀ Brazil : figured: type B.M.
hippalus Felder 1862: ♂ Colombia.
sataspes Felder 1862: ♂ Mexico: type B.M.
B.M. 16 ♂ 1 ♀ Mexico. 7 ♂ 4 ♀ Guatemala. 3 ♂ 1 ♀ Honduras. 2 ♂ Nicaragua. 1 ♂ 1 ♀ Salvador. 4 ♂ Costa Rica. 10 ♂ 1 ♀ Panama. 7 ♂ 1 ♀ Colombia. 13 ♂ 1 ♀ Venezuela. 12 ♂ 4 ♀ Trinidad. 2 ♂ Jamaica. 1 ♂ Br Guiana. 1 ♂ 1 ♀ Fr Guiana. 12 ♂ 1 ♀ Peru. 8 ♂ 4 ♀ Bolivia. 14 ♂ 8 ♀ Amazons. 1 ♂ 1 ♀ Bahia. 1 ♀ Maranham. 2 ♂ Goyaz. 1 ♂ Minas Geraes. 21 ♂ 2 ♀ Matto Grosso. 3 ♂ 3 ♀ S. Brazil. 5 ♂ 4 ♀ Paraguay.

2a (1). F with at least a hyaline spot at apex. Nudum of 18 segments. Apex F not produced.
2 (3, 4). Above, dark brown to tawny, varying in the same way as *nearchus*: ♂ more or less covered with grey hairs. ♂ with 2 to 4 apical hyaline spots F: ♀ usually with discal and cell spots. F falcate: H conspicuously toothed. ♂ F 20 mm.

erosus Hübner 1812: ? loc: figured. Fig Seitz: Godman & Salvin genitalia: Hayward 1948, ♂ and genitalia.
Synonym. *westermanni* Latreille 1824: Brazil.
B.M. 17 ♂ 13 ♀ Mexico. 21 ♂ 1 ♀ Guatemala. 9 ♂ 1 ♀ Honduras. 2 ♂ Salvador. 2 ♂ 1 ♀ Nicaragua. 9 ♂ 3 ♀ Costa Rica. 12 ♂ 2 ♀ Panama. 26 ♂ 15 ♀ Colombia. 25 ♂ 4 ♀ Venezuela. 12 ♂ 9 ♀ Trinidad. 2 ♂ Tobago. 2 ♂ Grenada. 1 ♂ 1 ♀ Surinam. 3 ♂ 3 ♀ Fr Guiana. 7 ♂ 1 ♀ Ecuador. 16 ♂ Peru. 22 ♂ 2 ♀ Bolivia (Reyes. Santa Cruz). 9 ♂ 2 ♀ Amazons. 1 ♀ Ceara. 1 ♀ Pernambuco. 2 ♂ 2 ♀ Bahia. 5 ♂ 1 ♀ Goyaz. 1 ♂ Minas Geraes. 21 ♂ Matto Grosso. 15 ♂ 1 ♀ S. Brazil. 19 ♂ 1 ♀ Paraguay.

3 (2. 4). Above, white with dark brown bases and termen, but the central area may be variegated with a few dark markings. Below, white with darkened termen and variegated with dark markings of the *erosus* type: unh with a conspicuous black tornal spot. F termen even: H toothed as in *erosus*. ♂ F 19 mm.

emorsa Felder 1869: ♂ Mexico: type B.M. Fig Seitz: Godman & Salvin, ♂ and genitalia.
Synonym. *albimedia* Draudt 1922: Mexico: figured.
B.M. 23 ♂ 2 ♀ Mexico.

4 (2. 3). Above, grey. Upf with a dark band before the middle, usually bearing a hyaline cell spot: apex darkened and there are narrow dark discal and submarginal lines: a single apical hyaline spot in space 8. Uph with a dark sub-basal as well as a discal line. Below with grey lines and a more or less well-marked tornal dark spot. F termen even, dorsum only slightly concave: H termen only slightly indented. ♂ F 17 mm.

decens Butler 1874: ♂ Peruvian Amazons: type B.M. Fig Seitz.
Synonym. *brasilicola* Strand 1920: Brazil.
B.M. 11 ♂ 1 ♀ Peru (Pebas. Ucayali. Carabaya). 2 ♂ Amazons (St Paulo). 2 ♂ S. Brazil (São Paulo).

5a (1a). Antennal apiculus shorter, stouter: nudum of less than 18 segments. Above, brown with more or less visible dark bands. F excavate at space 1b and H at apex in space 7.
5b (7a). F no hyaline spot mid costa: usually 2 or 3 apical and 2 discal hyaline spots. Above, dark bands conspicuous: below, tawny brown. Nudum 11 segments: apiculus rather blunt.
5 (6). ♂ with costal fold upf. Uph dark discal band continuous across space 7. ♂ F 18 mm.

funebris Felder 1869: ♀ Mexico: type B.M. Fig Seitz: Godman & Salvin, ♂ ♀ and genitalia.
B.M. 20 ♂ 2 ♀ Mexico.

6 (5). ♂ no costal fold. Uph dark discal band dislocated at vein 7, a dark spot in space 7 detached and shifted inwards. ♂ F 16 mm.

corrosus Mabille 1878: ♂ "Cayenne": type B.M. Fig Seitz: Godman & Salvin, ♂ and genitalia.

Synonym. *sericus* Plötz 1884: Chiriqui.
B.M. 5 ♂ Mexico. 11 ♂ 1 ♀ Guatemala. 1 ♂ Salvador. 1 ♂ Nicaragua. 6 ♂ Costa Rica. 5 ♂ Panama. 1 ♂ type (probably from Panama). 1 ♂ "Ecuador".

7a (5b). F with a small hyaline spot mid costa in space 11. ♂ no costal fold. Darker.
7 (8). F with a hyaline apical spots in spaces 6 to 9: often a discal spot in space 2: occasionally up to 2 spots in space 1b, across space 2, in space 3, lower cell spot and a second spot in space 2 below it. Unh chocolate with faint bands. ♂ F 17 mm. Nudum of 16 segments, apiculus pointed.

mutilatus Hopffer 1874: ♂ Chanchamayo. Fig Hayward 1948, ♂ and genitalia.
Synonym. *excisus* Mabille 1878: Rio Apurimac. Fig Seitz as *incisa*. Mabille's description appeared on the 15th Jan, 1878, in Pet Nouv Ent 2/9: 198: later in the same year he used the same name for an apparently different species, in Ann Soc Ent Belg 21: 29. As he used the same generic name, the second citation is invalid.
B.M. 1 ♂ Ecuador. 60 ♂ Peru (Charape. Chanchamayo. Huancabamba. Amazonas. Carabaya. Cuzco). 26 ♂ Bolivia (Charaplaya. Chulumani. Cochabamba. La Paz. Apalobamba. Tanampaya).

8 (7). F up to 3 apical hyaline spots, but none in space 9: ♂ without, ♀ (much paler) with discal hyaline spots in spaces 2 and 3. Nudum of 13 segments.

liborius. 2 sub-species.
(a). ♂ F 15 mm., dark bands conspicuous above. Unh dorsal half of wing more or less white.
Sub-sp. **liborius** Plötz 1884: ? loc. Fig Seitz: Hayward 1948, ♂ and genitalia.
B.M. 1 ♀ "Colombia". 3 ♂ 2 ♀ Bahia. 6 ♂ Minas Geraes. 2 ♂ Matto Grosso. 7 ♂ 1 ♀ S. Brazil (Rio. Paraná. São Paulo. Espirito Santo).
(b). ♂ F 16 mm. More uniform above. Unh no white scaling.
Sub-sp. **areta** nov: ♂ Rio Grande do Sul, Santa Maria, 1,400 ft., Jan 1920, A. Hall: type B.M.

B.M. 5 ♂ 5 ♀ Santa Catharina. 1 ♂ 1 ♀ Theresopolis. 1 ♂ 1 ♀ Joinville. 2 ♂ 1 ♀ Rio Grande do Sul. 1 ♂ Uruguay. 1 ♂ Argentine (Misiones).

E.56. SYSTASEA Edwards 1877: type *pulverulenta* Felder: sole species included was *zampa* Edwards, which is a synonym of *pulverulenta*.
Synonyms. *Lintneria* Edwards 1877: homonym (Butler 1877) replaced by *Systasea*.
Plesiocera Mabille 1891: type *pulverulenta* Felder: sole species included was *filipalpis* Mabille and the diagnosis was based on a specimen of *pulverulenta* with the head of a Satyrid gummed on: homonym (MacQuart 1841).

Differs only from *Antigonus* in having the tip of the antennae blunt. Above greenish-tawny with a conspicuous narrow white line across the centre F and disc H. F not excavate in space 1b, nor H in space 7. Antennal nudum of 14–17 segments. ♂ with costal fold and tibial tuft.

1 (2. 3). Upf central white band unbroken. Style of clasp no longer than the cuiller. ♂ F 16 mm.
pulverulenta Felder 1869: ♂ Mexico. Fig Godman & Salvin: Holland 1931: Seitz: genitalia by Lindsey, Bell and Williams 1931 and by Bell 1941.
Synonyms. *zampa* Edwards 1876: Arizona. Type fig by Holland 1931.
tamiatus Plötz 1884: Oaxaca.
filipalpis Mabille 1891: ♀ no loc: type B.M.
B.M. 2 ♂ 1 ♀ Arizona. 25 ♂ 3 ♀ Mexico. 4 ♂ 1 ♀ Guatemala.

2 (1. 3). Upf central white band broken at lower end of cell, spot in space 2 shifted inwards. Style of clasp very long, curved over cuiller. ♂ F 15 mm.
evansi Bell 1941: ♂ Baboquivari Mts., Arizona: genitalia figured.
B.M. 3 ♂ 1 ♀ Arizona. 1 ♂ Mexico (N. Sonora).

3 (1. 2). Upf markings consist of small spots.
microsticta Dyar 1923: Mexico.
B.M. None.

E.57. TIMOCHREON Godman & Salvin 1896: type *satyrus* Felder: sole species included.

Antennae < ½ costa: shaft plain: apiculus arcuate from beginning of nudum of 14 segments: apiculus = rest of club, slender. Palpi = head. Wings generally produced: vein 1a > vein 8. ♂ no costal fold: hind tibiae with a tuft and thoracic pouch. Uncus divided: style of clasp divided into 2 long branches. Brown, without markings upf: uph with a submarginal row of black spots: resembles a Satyrid.

1 (2). Unf discal dark line broken outwards at vein 4: no tawny colouring. Style of clasp with the two branches equal.

satyrus. 3 sub-species.

(a). Tip of inner branch of style serrate: of outer branch expanded: sub-cuiller tapered to a point. Below varies from violet-grey to pale brown: dark bands unh broad or narrow. ♂ F 17 mm.

Sub-sp. **satyrus** Felder 1867: ♂ Colombia: figured: type B.M. Fig Seitz: genitalia by Godman & Salvin.

B.M. 18 ♂ 6 ♀ Panama. 9 ♂ 4 ♀ Colombia. 1 ♂ 1 ♀ Venezuela. 1 ♂ Ecuador (Loja). 1 ♂ Amazons.

(b). Tip of inner style rounded: of outer style, not expanded, serrate: sub-cuiller broad-ended and rounded. Unf with a narrow macular band running outside the dark discal line. Unh brown bands broad contrasting with the violet-grey central and basal colouring. ♂ F 15 mm.

Sub-sp. **forta** nov: ♂ Pará: type B.M.

B.M. 2 ♂ Pará.

(c). Tip of inner style rounded: of outer style, slightly expanded, smooth: end of sub-cuiller broad and concave. Wings rounded. Below, uniform pale ochreous brown, with the usual dark bands faint and narrow. Unf the discal line double with faint whitish spots between. ♂ F 15 mm.

Sub-sp. **tampa** nov: ♂ Chapada, Matto Grosso.

B.M. 2 ♂ Matto Grosso.

2 (1). Unf the discal dark line unbroken, separating the tawny basal colouring from the brownish-white area before the dark macular submarginal band. Unh violet-grey with the central band consisting of 2 narrow brown lines: discal dark line sharply defined and borders the dark submarginal area, whereon are the usual dark spots. ♂ F 15 mm. Outer branch of style shorter than the inner branch: tip of inner branch excavate: of the outer branch expanded slightly and serrate on both edges: upper edge of sub-cuiller curved upwards and sharply pointed.

doria Plötz 1884: ♂ "Mexico". Fig Seitz.
B.M. 1 ♀ Pará. 2 ♂ Bahia. 1 ♂ Minas Geraes. 1 ♂ Petropolis.

E.58. ZOPYRION Godman & Salvin 1896: type *sandace* Godman & Salvin: fixed by Lindsey 1925.

Like *Timochreon* without hyaline spots, but lacking the black submarginal spots uph. Wings more rounded. Antennae < ½ costa: apiculus obtuse from beginning of the nudum of 10 segments: apiculus = rest of club. Palpi, third segment long. ♂ with or without a costal fold: hind tibiae with a tuft fitting into a thoracic pouch. Uncus divided: usually a considerable development of a sub-cuiller of the clasp and a long style.

1a (5). ♂ with a costal fold. Unh no sub-basal dark band. The first four species appear to replace one another in widely separated areas and might be regarded as subspecies, but in *evenor* the superficial, and in *subvariegata* the genitalia, differences are considerable.

1b (4). Clasp with a sub-cuiller, a long slender process from near the base: style not longer than the cuiller. ♂ costal fold conspicuous. ♂ F 14 mm.

1 (2. 3). Style of clasp blunt at the tip, which is double. Unh striated grey with striated bands: the postdiscal band runs into the submarginal band at apex. Unf grey to pale brown: ♀ darker.

sandace Godman & Salvin 1896: ♂ Mexico: type B.M.: figured ♂ and genitalia. Fig Seitz: Hayward 1948, genitalia. The Godman & Salvin genitalia fig is faulty, due to the clasp having been broken: Hayward has copied it. The fig here given has been taken from the type.
B.M. 21 ♂ 5 ♀ Mexico. 1 ♂ Guatemala.

2 (1. 3). Style of clasp sharply pointed. Unh striated grey with darker tawny central and postdiscal bands looped together before apex: a submarginal row of conspicuous black spots. Unf pale brown to dull tawny.

satyrina Felder 1867: ♂ Venezuela: type B.M.: figured. Fig Seitz (badly).

Synonym. *chinoba* Weeks 1906: ♂ Venezuela. Fig Weeks 1911.

B.M. 10 ♂ 5 ♀ Colombia. 38 ♂ 26 ♀ Venezuela.

3 (1. 2). Style of clasp blunt and spined. Unh central and postdiscal bands looped together, but no submarginal dark spots.

evenor. 3 sub-species.

(a). Unh striated grey, dark bands continuous. Unf pale brown to dull tawny.

Sub-sp. **tressa** nov: ♂ Pará: A. Miles Moss.

B.M. 5 ♂ Pará.

(b). Unh similar but ochreous tinged. Unf bright tawny.

Sub-sp. **thania** nov: ♂ Pernambuco: type B.M.

B.M. 1 ♂ 1 ♀ Pernambuco. 5 ♂ 3 ♀ Bahia.

(c). Unh typically striated pale yellowish-grey with brown macular bands, the central band consisting of 3 well-separated spots. Unf pale brown turning to dull tawny at costa. The typical form grades to a darker form resembling *tressa*, with the central band continuous, sometimes very broad and even united to the postdiscal band by a large, brown central area.

Sub-sp. **evenor** Godman & Salvin 1901: ♂ Corumba, Brazil: type B.M. Fig Seitz: Hayward 1948, ♂ and genitalia.

Synonym. *disrupta* Mabille & Boullet 1917: ♂ Argentine.

B.M. 12 ♂ Bolivia (Santa Cruz. Buenavista. San José). 13 ♂ 1 ♀ Matto Grosso. 16 ♂ 2 ♀ Paraguay. 16 ♂ 4 ♀ Argentine.

4 (1b). Clasp without a sub-cuiller: style slender, pointed, longer than cuiller. ♂ costal fold feeble.

subvariegata. 2 sub-species.

(a). ♂ F 15 mm.: wings rounded. Upf with dull ochreous discal and apical opaque spots. Unh striated brown with more or less developed dark brown continuous bands as in *evenor tressa*.

Sub-sp. **subvariegata** Hayward 1941: ♂ Ecuador, Huigra: genitalia figured.
Synonym. *inornata* Hayward 1941: ♂ Ecuador.
B.M. 2 ♂ 1 ♀ Ecuador (Guyaquil). 1 ♂ Peru (Perene).
(b). ♂ F 13 mm.: wings more produced. Upf the spots grey. Unh with violet-grey scaling: a large central dark area uniting the central and postdiscal bands, as in dark forms of *evenor*.

Sub-sp. **thyas** nov: ♂ Peru, Amazonas, Chachapoyas: type B.M.
B.M. 1 ♂ 1 ♀ Peru (type loc).

5 (1a). ♂ no costal fold. Unh brownish-white, striated, with 3 straight dark bands, sub-basal, central and postdiscal, parallel and equidistant, inwardly white edged. Above dark velvet brown, with an ill-defined macular submarginal band. Unf dark brown, with a broad paler submarginal band, inwardly sharply defined and centrally with narrow dark spots. ♂ F 12 mm.

reticulata Hayward 1942: ♂ Goyaz: genitalia figured.
B.M. 6 ♂ 1 ♀ Matto Grosso. 2 ♂ S. Brazil (São Paulo. Paraná).
Note. ? *Zopyrion pamphilus* Hayward 1933: ♂ Argentine: figured. Fig Hayward 1948, ♂ and genitalia are of *Erynnis tages* Linnaeus from Europe.

E.59. ANISOCHORIA Mabille 1876: type *pedaliodina* Butler, fixed by Watson 1896 as *polysticta* Mabille, which is a sub-species of *pedaliodina*.

F apex truncate and termen more or less concave below apex: cell long = dorsum or nearly so: costal veins straight and vein 11 ends over end cell. H quadrate, widest at end of vein 4: dorsum = costa: vein 5 central. Antennae short < ½ costa: bent to apiculus at beginning of nudum of 14 segments: apiculus < rest of club. Palpi very long, twice width of head, pendulous. ♂ F no costal fold: hind tibiae with a hair tuft entering a thoracic pouch, except in *vianna*:

in *superior* and *bahia* there are upturned hairs along the dorsum unf. A compact genus except for *albida* which looks like a miniature of *Theagenes albiplaga*, but the venation and genitalia accord with *Anisochoria*.

1a (8). Uph plain, no white area. Unh with a complex and variable pattern.

1b (5a). H costa straight and apex angled.

1 (2a). Upf apical spots in spaces 6, 7, 8 sub-equal. Above, very dark velvet brown or black.

pedaliodina. 4 sub-species.

(a). Uph plain. Upf hyaline spots strongly marked and complete. Valva of clasp as long as cuiller. ♂ F 18 mm.

Sub-sp. **bacchus** nov: ♂ Atoyac, Vera Cruz: type B.M.: figured by Godman & Salvin as *polysticta*, ♂ and genitalia. B.M. 21 ♂ 4 ♀ Mexico. 11 ♂ Guatemala. 2 ♂ Honduras. 1 ♂ Salvador.

(b). Similar, apically paler on upf and spotting much reduced. Valva of clasp slender, > cuiller.

Sub-sp. **polysticta** Mabille 1876: Colombia. Fig Seitz. Synonym. *lemur* Möschler 1878: ♂ Colombia. B.M. 1 ♂ 1 ♀ Costa Rica. 8 ♂ 5 ♀ Panama. 14 ♂ 4 ♀ Colombia. 11 ♂ 1 ♀ Venezuela. 1 ♂ Surinam.

(c). Larger, ♂ F 19 mm., and darker: spots upf few and very small, apex not paler. Valva of clasp as in *polysticta*, lower spined portion of cuiller more angular.

Sub-sp. **pedaliodina** Butler 1870: ♂ ? loc: type B.M. Synonym. *oligosticta* Mabille 1876: ♂ Colombia. B.M. 8 ♂ Ecuador (Loja. Zamora). 35 ♂ 1 ♀ Peru (Moyabamba. Chanchamayo. Huancabamba. Cuzco. Pozuzo. Marcapata). 24 ♂ 2 ♀ Bolivia (Yungas, La Paz. Santa Cruz. Cochabamba). 2 ♂ Amazons (Nauta. Itaituba).

(d). ♂ F 17 mm. Above, paler. Upf hyaline spots generally absent, except at apex. Upf and uph with distinct dark bands. Unh tornal area conspicuously whitened. Tip of cuiller of clasp angled.

Sub-sp. **extincta** Hayward 1933: ♂ Argentine: figured, ♂ and genitalia. Fig Hayward 1948, ♂ and genitalia. B.M. 1 ♂ Amazons (R. Tapajos). 3 ♂ Bahia. 8 ♂ 4 ♀ Matto Grosso. 4 ♂ S. Brazil (Rio Paraná).

2a (1). Upf with the apical spot in space 7 oblique and longer than the spots in spaces 6 and 8. Above, paler, matt brown. F more concave below apex and H more crenulate.

2b (4). Valva short, no longer than cuiller.

2 (3). Above with distinct submarginal dark bands, the latter macular on F: often with a purple wash. ♂ F 18 mm. Valva narrow, undivided: aedoeagus broadly divided at tip.

sublimbata Mabille 1883: ♂ Colombia. Fig Hayward 1948, ♂ and genitalia.

Synonyms. *bibiana* Plötz 1884: Colombia. Fig Seitz.
parvipuncta Jorgensen 1932: ♂ Paraguay.
palpalis Hayward 1933: ♂ Argentine: fig ♂ and genitalia.
B.M. 2 ♂ Colombia. 8 ♂ 1 ♀ S. Brazil (Rio. Paraná. Novo Friborgo). 7 ♂ Paraguay. 1 ♂ Argentine (Misiones).

3 (2). Above, unmarked except for 2 hyaline apical spots. Small, ♂ F 15 mm. Valva broad bifid: aedoeagus entire.

subpicta Schaus 1902: ♂ Paraná.
B.M. 6 ♂ S. Brazil (Paraná. São Paulo).

4 (2b). Valva of clasp very long and thin, curved over cuiller: lower part of cuiller with a long narrow process.

minorella. 2 sub-species.

(a). Above, dark bands absent. Tip of cuiller protruding. ♂ F 18 mm.

Sub-sp. **verda** nov: ♂ Rio Verde, Rio Pastaza, E. Ecuador, 5,000 ft.: M. G. Palmer: type B.M.
B.M. 3 ♂ 1 ♀ Ecuador (type loc. Ambato).

(b). Above, dark bands showing and upf often with small hyaline discal spots as in *pedaliodina*. Tip of cuiller not projecting. ♂ F 16 mm. There seem to be 2 seasonal forms, differing in the intensity of the white colouring unh.

sub-sp. **minorella** Mabille 1897: ♂ Bolivia: type B.M.
B.M. 3 ♂ Peru (Huancabamba. Amazonas, Chachapoyas.) 10 ♂ 2 ♀ Bolivia (R. Tanampaya. Cochabamba. San José). 9 ♂ 1 ♀ Matto Grosso.

5a (1b). H costa convex and apex rounded. Upf no hyaline spots other than 3 at the apex and an outer dot in space 5. Above, matt brown.

5b (7). ♂ unf with erect hairs along dorsum.

5 (6). Small, ♂ F 16 mm. Above, plain dark brown without dark bands. Unf a conspicuous pale area at apex and at tornus, no dark band, cilia chequered. Unh outer half of wing grey, contrasting with the solid dark discal band. Tip of cuiller pointed and turned in.

bahia nov: ♂ S. Antonio da Barra, Bahia: Gounellé: Dec 1888: type B.M.

B.M. 3 ♂ Bahia.

6 (5). Large, ♂ F 18 mm. Above, with an obscure dark macular submarginal band preceded by a narrow pale band, which on F is disclocated at vein 6. Unf with faint dark bands, cilia not chequered. Unh darker, discal band not solid and less conspicuous than the dark central area. Tip of cuiller divided, not bent in.

superior Mabille 1897: Bolivia.

B.M. 1 ♂ Bahia. 1 ♀ Minas Geraes. 21 ♂ 7 ♀ S. Brazil (Rio. Espirito Santo. Paraná).

7 (5b). ♂ unf without erect hairs along the dorsum: hind tibiae without a hair tuft and no thoracic pouch. Above, blackish-brown with a conspicuous row of submarginal black spots on a grey band: cilia chequered. Unf with a pale dash at apex, no dark bands, tornus slightly paler. Unh costa mottled with pale violet scaling: central dark area turning black about origin of vein 2, where it is outwardly edged with violet scaling: outer third of wing mottled with greenish-ochreous scaling, centred with a narrow band of violet scaling. Genitalia resemble *bahia* but the cuiller is longer and the aedoeagus has a spine on the right near the tip. ♂ F 18 mm.

vianna nov: ♂ Viannopolis, Goyaz: March 1930: R. Spitz: type B.M.

B.M. 2 ♂ Goyaz.

8 (1a). Uph with a large central white area. ♂ F 15 mm.

albida. 2 sub-species.

(a). Upf with a large central white area: usually a hyaline spot in space 3 in addition to the apical dots. Uph central white area reaches costa. Unf white turning yellow near the apical dark area of mottled brown and white scales.

Sub-sp. **albida** Mabille 1888: S. America: figured. Fig in Seitz is of *alco*.
Synonym. *bimaculata* Mabille & Boullet 1917: ♂ Peru.
B.M. 12 ♂ Peru (Huancabamba. Oxapampa. Carabaya. Amazonas, Chachapoyas).
(b). Upf no central white area, entirely shaded with brown scales and with obscure narrow dark bands: no hyaline spot in space 3. Uph central white area not reaching costa. Unf yellow, apex brown.

Sub-sp. **alco** nov: ♂ Tanampaya, Bolivia: 6,500 to 8,000 ft.: Garlepp: type B.M. Fig Seitz as *albida*.
B.M. 1 ♂ S. Peru (Uruhasi). 15 ♂ Bolivia (La Paz, Yungas. San Jacintho. Tanampaya).

F. ERYNNIS GROUP

Antennae shorter than half the costa. The club is bent shortly after its commencement to an arcuate apiculus, which is generally sharply pointed, but is blunt in a few genera.

The palpi are porrect: very short and appressed to the face in *Aethilla*, but generally long and sometimes pendulous.

Legs are normal except in *Doberes*.

Forewing cell short, except in *Grais*: the lower median veinlet generally present. In several genera vein 12 is very short and upturned at its end.

Hindwing vein 5 well marked and generally oblique. Tornus rarely longer than the costa.

Secondary sexual characters. ♂ generally with a costal fold on forewing. Hind tibiae nearly always with a tuft fitting into a thoracic pouch. One species in *Achlyodes*, one in *Tosta* and several in *Cycloglypha* have a brand near the base of the costa uph, correlated with a speculum at the base unf. In the W. Indian genus *Ephyriades* the scales on the forewing are modified.

Most of the species are dark banded, without hyaline spots. Some have intricate patterns which defy description.

KEY TO GENERA

1a (12a). Antennal apiculus sharply pointed.

1b (8a). F vein 12 long, ends on costa after the origin of vein 3. Generally without hyaline spots.

1c (4a). Palpi very short, second segment appressed to face, third segment just protruding.

1 (2a). F vein 12 very long, ends over the origin of vein 5: vein 3 is placed midway between veins 2 and 4. Thorax very stout, as in *Pyrrhopyge* or *Proteides*. Wings produced at apex F and tornus H. Nudum very long, 32.

Aethilla. 8 species. Mexico–Paraguay.

2a (1). F vein 12 ends over origin of vein 4: vein 3, at its origin is much nearer to vein 4 than to vein 2.
2 (3). H quadrate, produced at end of vein 4. F more or less falcate. Palpi brown below. Shaft of antennae not chequered. Nudum 22–36.

Achlyodes. 5 species. Mexico–Argentine. W. Indies.

3 (2). H widest at costa, not produced at end of vein 4. F truncate to vein 6: cell long, longer than dorsum. Above, rather pale brown. Palpi yellow below. Nudum 22.

Grais. 1 species. Mexico–Argentine. W. Indies.

4a (1c). Palpi long, as long as head or longer: 2nd segment not appressed to face and third segment conspicuously protruding.
4 (5a). Hind tibiae without the upper pair of spurs: hind and mid tibiae heavily spined. H quadrate. Nudum 25.

Doberes. 2 species. Mexico–Guatemala.

5a (4). Legs normal: hind tibiae with 2 pairs of spurs, and mid tibiae smooth.
5b (7). F produced, cell nearly as long as dorsum. Antennae chequered in front, club stout.
5 (6). H termen concave in spaces 4 and 5. Tawny with dark bands. Nudum 18.

Timochares. 2 species. Mexico–Argentine. W. Indies.

6 (5). H termen even. Dark brown with dark bands. Nudum 20–24.

Anastrus. 9 species. Mexico–Argentine. W. Indies.

7 (5b). Wings rounded. F cell very short. Antennae plain black. Nudum 21–24.

Tosta nov: type *Tosta tosta* Evans (p. 186). 4 species. Honduras–Amazons and Peru.

8a (1b). F vein 12 short, more or less upturned at end, ending on costa before or over the origin of vein 3. Costa centrally angled and unf hollow (Batwing). Dark with complex markings.

8 (9a). Apex F and tornus H produced. H dorsum longer than costa. Nudum 19.
Ebrietas. 6 species. Mexico–Argentine.

9a (8). Apex F and tornus H not produced. H costa longer than the dorsum.
9b (11). F vein 11 ends over end of cell.
9 (10). H termen irregular. F broadly truncate to end of vein 2, below which it is concave. Nudum 15.
Helias. 1 species. Mexico–Argentine.

10 (9). H termen evenly convex. Nudum 19.
Camptopleura. 5 species. Mexico–Paraguay.

11 (9b). F vein 10 ends over end of cell. Nudum 17.
Cycloglypha. 6 species. Mexico–Paraguay.

12a (1a). Antennal apiculus blunt. Club stouter and more or less flattened.
12b (14a). F vein 12 short, as in 8a above.
12 (13). F apex conspicuously truncate to end of vein 5 and termen concave at end of vein 7. Nudum 14.
Theagenes. 2 species. Mexico–Argentine.

13 (12). F termen convex at apex. Nudum 14–18.
Chiomara. 5 species. U.S.A.–Argentine. W. Indies.

14a (12b). F vein 12 long, straight and ends over origin of vein 4 or beyond.
14 (15a). F costa arched, apex more or less truncate. Nudum 15–18.
Gesta nov: type *Thanaos gesta* Herrich-Schäffer 1863. 4 species. U.S.A.–Argentine. W. Indies.

15a (14). F costa straight: apex angled or evenly convex.
15 (16). F cell long, nearly as long as dorsum. Nudum 15–24.
Ephyriades. 3 species. W. Indies.

16 (15). F cell short, much shorter than dorsum. H termen slightly concave in spaces 4 and 5. Dark species with few hyaline spots on F. Nudum 14–21.
Erynnis. 11 species. Canada–Argentine.
4 species occur in the Palaearctic zone.

KEY TO SPECIES

F.1. AETHILLA Hewitson 1868: type *eleusinia* Hewitson: sole species included.
Synonym. *Eurypterus* Mabille 1877: type *gigas* Mabille: fixed by Kirby 1879: homonym (Dekay 1826).

Characterised by the very stout thorax (6 mm. wide), as in *Pyrrhopyge* or *Proteides*, combined with the very short cell and long slender antennal club, as in *Achlyodes*, which genus it resembles in the form of genitalia, but differs in wing shape, both wings having the termen evenly convex, while the apex F and the tornus H are produced. Antennae short, shaft not chequered, nudum with 10 segments on the shaft and 22 on the apiculus. Palpi short, second segment erect, ♂ without a costal fold upf: hind tibiae with a hair tuft fitting into a thoracic pouch. The species *melas* and *later* are aberrant.

1a (8). F not falcate. H produced at tornus.
1b (4a). Unh cilia white or yellow. ♂ F 25–28 mm.
1 (2a). F and H cilia conspicuously white. Unh unmarked. In 1 ♂ Peru and 2 ♂ Bolivia the cilia are pale yellow and in 1 ♂ Bolivia the termen unh is narrowly white before the cilia.
eleusinia Hewitson 1868: ♂ Ecuador: type B.M. Fig Hayward 1948: ♂ and genitalia.
B.M. 4 ♂ Colombia. 6 ♂ Ecuador (Archidona). 56 ♂ Peru (Chanchamayo. Pozuzo. Tarapote. Charape. Cuzco). 13 ♂ Bolivia (La Paz. Cochabamba. R. Songo. Charape). 2 ♂ Upper Amazons (Nauta).

2a (1). F cilia brown.
2 (3). Unh with a white postdiscal band: cilia white, narrow.
epicra Hewitson 1870: ♂ Ecuador: type B.M
Synonym. *oeclydes* Plötz 1884: Colombia. Fig Mabille & Vuillot 1895: Seitz (very badly).
B.M. 12 ♂ Colombia (Cauca. R. Dagua. Chaco). 6 ♂ Ecuador (Balzapamba. Amazonas).

3 (2). Unh with a broad submarginal yellow band and yellow cilia.

lavochrea Butler 1874: ♂ Costa Rica: figured: type B.M. Fig Seitz.
Synonym. *athymnios* Möschler: ♀ C. America.
B.M. 10 ♂ 2 ♀ Mexico. 2 ♂ Guatemala. 1 ♂ 1 ♀ Honduras. 2 ♂ 1 ♀ Nicaragua. 4 ♂ Costa Rica. 5 ♂ 2 ♀ Panama. 1 ♂ Colombia.

4a (1b). Unh cilia brown.
4 (5a). Unf and unh with grey submarginal scaling, sparse on F, denser H. ♂ F 24–26 mm.

echina. 2 sub-species.
(a). Unh with a broad discal white band in spaces 1c to 3, extending to the submarginal white scaling and enclosing a large black spot in space 1c: very variable.

Sub-sp. **echina** Hewitson 1870 (March): ♂ Ecuador: type B.M. Fig Staudinger 1888: Seitz: Godman & Salvin, ♂ and genitalia: Hayward 1948, ♂ and genitalia.
Synonyms. *haber* Mabille 1891: ♂ "Peru". Fig Mabille & Vuillot 1895.
subviolacea Mabille 1904: ♂ Ecuador: type B.M.
B.M. 2 ♂ Mexico. 3 ♂ Guatemala. 11 ♂ Honduras. 7 ♂ Panama. 9 ♂ Colombia. 3 ♂ Ecuador. 20 ♂ Peru (Rentema Falls. La Merced. Tarapote. Ucayali). 5 ♂ Upper Amazons (R. Putumayo. Iquitos. S. Paulo de Olivenca). 1 ♂ Goyaz. 3 ♂ Minas Geraes.
(b). Unh the white discal band absent, but present in a few individuals.

Sub-sp. **coracina** Butler 1870 (Dec): ♂ Brazil: type B.M.: figured. Fig Seitz: Hayward 1948, ♂.
Synonym. *primus* Plötz: 1882: Brazil.
B.M. 1 ♂ S. Peru (Carabaya). 16 ♂ Bolivia (Santa Cruz). Buenavista. San Mateo. Santiago del Estera). 3 ♂ 1 ♀ Bahia. 2 ♂ Minas Geraes. 29 ♂ 18 ♀ S. Brazil (Paraná. São Paulo. Rio. Espirito Santo). 19 ♂ 1 ♀ Paraguay.

5a (4). Unf and unh no grey scaling before termen.
5b (7). Unf and unh with a dull ochreous bar end cell and a broad dull ochreous submarginal area, inwardly edged

and centrally traversed by a narrow, dark brown band, and cut by dark veins.

5 (6). Upf uniform, with alternating dark and pale bands as unf: the outer pale band is more or less overlaid with dark leaden-grey scales. Unh there is a tendency for the ochreous area to get brighter tornally, most pronounced in the type. ♂ F 25–26 mm.

memmius Butler 1870: ♂ Venezuela: type B.M. Fig Butler 1874 (of type). Seitz's fig has a bright green underside and refers to some quite different species. Fig as *melas* by Mabille & Vuillot 1893 and by Seitz.

Synonyms. *hahneli* Staudinger 1888. ♂ Venezuela: figured. The figs by Godman & Salvin, Seitz and Williams & Bell 1934 refer to *Astraptes galesus cassius*.

rufonigra Mabille & Boullet 1919: ♀ ? loc.

B.M. 2 ♂ Colombia. 9 ♂ Venezuela. 1 ♂ Amazons. 1 ♂ Minas Geraes.

6 (5). Upf the outer pale band is expanded apically into a large, bright ochreous area. ♂ F 28–30 mm.

gigas Mabille 1877: ♂ Peru: type B.M.

Synonym. *maxima* Hayward 1941: ♂ Ecuador: figure of genitalia.

B.M. 12 ♂ Peru (Huancabamba. Chanchamayo. Rio Palcazu. Huanco). 6 ♂ Bolivia (Cochabamba. Yungas, La Paz).

7 (5b). Below, with a strong purple gloss: above, dark brown: the usual dark bands invisible above and very faint below. The nudum of the antennal apiculus does not run down the club as usual. ♂ F 23 mm.

melas Plötz 1882: Rio. The figs by Mabille & Vuillot 1895 and in Seitz refer to *memmius*.

B.M. 3 ♂ Pará.

8 (1a). F slightly falcate just below apex. H not produced at tornus. Antennae short, not reaching to origin of vein 12 F. A connecting link to *Achlyodes*. Above, more variegated than the other species in the genus. Below, glossed purple: unh with a discal band of light blue scaling from the dorsum to vein 6. The anal opening at the end of the abdomen is ringed with yellow scales. ♂ F 27 mm.

later Mabille 1891: ♂ Peru. Fig Mabille & Vuillot 1895.
B.M. 12 ♂ Peru (Chanchamayo. San Remon. La Merced).

F.2. ACHLYODES Hübner 1819: type *busirus* Stoll: fixed by Butler 1870.

Synonym. *Eantis* Boisduval 1836: type *thraso* Jung: sole species included.

Sebaldia Mabille 1903: type *busirus* Stoll: sole species included.

An assembly of somewhat dissimilar species grouped together because of the quadrate H, more or less falcate F: similarity of genitalia: plain unchequered antennal shaft: very short palpi and similar venation. Antennal nudum varies from 22 segments in *minna* to 36 in *thraso*. ♂ without a costal fold: hind tibiae with a hair tuft fitting in a thoracic pouch.

1a (3a). F falcation conspicuous and the cilia white at the end of vein 7: termen cut away inwards from vein 3 to tornus.

1 (2). H termen irregular, excavate at ends of veins 6 and 4 and of veins 2 and 1b. ♂ uph generally with a black band at base of hunched costa, correlated with a speculum base dorsum unf, surmounted by a black brand at base of cell and space 1b, covered by a thin upturned hair tuft from base of vein 1.

busirus. 4 sub-species.

(a). Unh tornal yellow area broad, 8 mm. wide in ♂, extending to vein 6 and surmounted by a dark macular band: in ♀ yellow colour extends above the dark band near dorsum. ♂ F 28 mm.

Sub-sp. **heros** Ehrman 1909: ♀ Venezuela.

Synonym. *sebaldus* Fabricius 1787: America: homonym (Stoll 1781).

B.M. 6 ♂ 1 ♀ Mexico. 9 ♂ 5 ♀ Guatemala. 8 ♂ 2 ♀ Honduras. 5 ♂ 3 ♀ Nicaragua. 4 ♂ 2 ♀ Costa Rica. 11 ♂ 3 ♀ Panama. 16 ♂ 2 ♀ Colombia. 8 ♂ 5 ♀ Venezuela. 3 ♀ Br Guiana. 8 ♂ 2 ♀ Ecuador. 19 ♂ 3 ♀ Peru. 8 ♂ 2 ♀

Bolivia. 7 ♂ 5 ♀ Upper Amazons. 1 ♂ 1 ♀ Rio Madeira.

(b). Unh yellow colouring replaced by brown in ♂ and paler, ochreous-brown in ♀. ♂ F 28 mm.

Sub-sp. **busirus** Stoll 1782: ♀ Surinam: figured plate 261 A & B (fig C is a ♂ of *heros*). Fig Seitz: genitalia by Godman & Salvin.

Synonyms. *bucolus* Mabille 1903.

obscura Mabille 1903: Colombia.

B.M. 5 ♂ 1 ♀ Bolivia. 1 ♂ 2 ♀ Fr Guiana. 11 ♂ 12 ♀ Amazons (Teffe to Pará). 1 ♂ Anna River. 1 ♂ Maranham. 2 ♂ Matto Grosso.

(c). Unh entirely black in ♂: ♀ with a little yellow colouring on either side of the black submarginal band. Smaller ♂ F 27 mm.

Sub-sp. **negro** Kaye 1921: ♂ Trinidad.

B.M. 12 ♂ 1 ♀ Trinidad.

(c). Very variable. Typically like *heros* but the yellow area unh is much narrower, 5 mm. in ♂, only extending to vein 4 and without any trace of the dark discal band: in ♀ not extending above the black discal band. Some specimens are paler above: in some the black submarginal band is absent and the yellow area wider. The brand uph and unf is missing in 10 ♂ from S. Brazil, 10 ♂ from Paraguay and 1 ♂ from the Argentine. ♂ F 28 mm.

Sub-sp. **rioja** nov: ♂ Rio de Janeiro: type B.M. Fig Hayward 1948, ♂ and genitalia, as *busirus*.

B.M. 5 ♂ 3 ♀ Bahia. 3 ♂ Minas Geraes. 9 ♂ 1 ♀ Matto Grosso. 26 ♂ 14 ♀ S. Brazil. 22 ♂ 4 ♀ Paraguay. 3 ♂ 1 ♀ Argentine.

2 (1). H termen regular. Antennal nudum 26–36.

thraso. 5 sub-species.

(a). F termen concave from vein 2 to dorsum. Unh no white scaling. Above, varies from a very dark form with the upf unmarked except for the violaceous grey-scaled costal and submarginal areas, and the uph unmarked shining deep blue, to a form with numerous grey spots on both wings. ♂ F 20 mm. Clasp with the inner edge of the cuiller concave, but undivided and the style slender: aedoeagus bifid.

Sub-sp. **thraso** Jung 1792: refers to figure by Seba vol IV, pl 17/8, 9. Fig Hübner 1807: Hayward 1948, ♂ and genitalia: Godman & Salvin, genitalia.

Synonyms. *tamenund* Edwards 1870: ♂ Texas.

peruvianus Mabille & Boullet 1917: ♂ Peru.

B.M. 5 ♂ 3 ♀ Texas. 12 ♂ Mexico. 11 ♂ 3 ♀ Guatemala. 8 ♂ Honduras. 1 ♂ Salvador. 1 ♀ Nicaragua. 8 ♂ Costa Rica. 14 ♂ 4 ♀ Panama. 16 ♂ 5 ♀ Colombia. 8 ♂ 6 ♀ Venezuela. 15 ♂ 3 ♀ Trinidad. 6 ♂ 1 ♀ Br Guiana. 1 ♀ Surinam. 5 ♂ 2 ♀ Fr Guiana. 7 ♂ 2 ♀ Ecuador. 11 ♂ 3 ♀ Peru. 12 ♂ 2 ♀ Bolivia. 8 ♂ 9 ♀ Amazons. 6 ♂ 3 ♀ N. Brazil. 3 ♂ 1 ♀ Minas Geraes. 9 ♂ 1 ♀ Matto Grosso. 19 ♂ 10 ♀ S. Brazil. 17 ♂ 5 ♀ Paraguay. 15 ♂ 5 ♀ Argentine.

(b). F termen straight from vein 2 to dorsum and aedoeagus undivided in the island forms. The Jamaican form resembles *thraso* and is nearly as variable. Uph shining blue in ♂ with few markings: more or less pronounced grey submarginal scaling. Unh no grey scaling. Inner edge of cuiller divided: cuiller narrow. ♂ F 22 mm.

Sub-sp. **mithridates** Fabricius 1793: Indies: fig in Jones Icones (compared and clearly the Jamaican form).

Synonym. *janus* Bell & Comstock 1948: ♂ Jamaica: figure of genitalia.

B.M. 14 ♂ 5 ♀ Jamaica.

(c). Above markings dull ochreous brown on a dark brown ground. Cuiller undivided and style broad, but not spatulate. ♂ F 20 mm. Unh no white scaling.

Sub-sp. **minor** Comstock 1944: ♂ Dominica: figured, and genitalia.

B.M. 13 ♂ 7 ♀ Dominica.

(d). Unh with white scaling, which forms a broad, compact submarginal area. ♂ F 22 mm. Cuiller undivided and style stout and spatulate.

Sub-sp. **papinianus** Poey 1832: Cuba: figured. Fig Seitz.

B.M. 37 ♂ 11 ♀ Cuba.

(e). Unh with the white scaling arranged in two narrow bands, discal and submarginal. Otherwise as *papinianus*.

Sub-sp. **sagra** nov: ♂ Haiti: type B.M.

B.M. 15 ♂ 8 ♀ Haiti. 1 ♂ Porto Rico. 1 ♂ St Thomas.

3a (1a). Falcation F slight and cilia not white at end of vein 7.

3 (4a). ♂ above, black: upf a lilacine area along outer half of costa, centrally divided by a black bar, submarginal lilacine band from vein 5 to dorsum: uph similar submarginal band, as well as a faint central band. Below, dark brown, glossed purple: unf apex with grey scaling: both wings with faint central and discal dark bands. ♀ above lilacine with alternating dark bands: below, paler brown, with narrow dark bands. ♂ F 22 mm. Antennal apiculus with a nudum of 22 segments.

minna nov: ♂ Bahia: type B.M.

B.M. 1 ♂ Venezuela. 1 ♂ 1 ♀ Bahia. 1 ♂ Minas Geraes. 1 ♂ 1 ♀ Espirito Santo. 1 ♂ 1 ♀ Brazil.

4a (3). Above, shining pale ochreous brown with well-marked, dark macular bands. Unh and basal half unf, dark brown with marking faint or not visible: outer half unf pale yellowish-brown. Uph with very long, sparse, erect hairs along vein 1b. Nudum of antennal apiculus with 27 segments. ♂ F 26 to 30 mm.

4 (5). Upf the postdiscal dark band broken at vein 2, spot in space 1b shifted inwards out of line: also usually broken at vein 4, upper part of band shifted inwards. Cuiller of clasp broad, style short and stout, directed away from cuiller.

pallida Felder 1869: ♂ Mexico: type B.M. Figs by Seitz and Godman & Salvin are of *selva*.

Synonym. *ozotes* Butler 1870: ♂ Venezuela: type B.M.

B.M. 5 ♂ Mexico. 20 ♂ Colombia. 8 ♂ Venezuela. 8 ♂ Ecuador (Loja. Baños. Ambato). 11 ♂ Peru (Chanchamayo. Huancabamba. Uruhasi. Amazonas. Marcapata). 8 ♂ Bolivia (La Paz. Cochabamba. Chulumani).

5 (4). Upf the postdiscal band straight. Cuiller narrow, style long, slender and parallel to cuiller.

selva nov: ♂ Jalapa, Mexico: type B.M. (specimen figured by Godman & Salvin as *pallida*, but their fig of the genitalia has the cuiller broken off). Fig Seitz as *pallida*. Pale and dark seasonal forms occur.

B.M. 20 ♂ 10 ♀ Mexico. 13 ♂ 2 ♀ Guatemala. 1 ♂

Honduras. 1 ♀ Nicaragua. 1 ♂ Salvador. 10 ♂ 10 ♀ Costa Rica. 8 ♂ Panama. 8 ♂ 2 ♀ Colombia. 11 ♂ 4 ♀ Venezuela. 7 ♂ 3 ♀ Ecuador (Balzapamba. Rio Pastaza. Ibarra). 22 ♂ Peru (Chanchamayo. Huancabamba. Moyabamba. Pozuzo. Tarapote). 8 ♂ Bolivia (Cochabamba. Yungas, La Paz. Apalobamba. San Jacinthe). 2 ♂ Minas Geraes.

F.3. GRAIS Godman & Salvin 1894: type *stigmaticus* Mabille: sole species included.

F cell long, longer than dorsum. Antennae short, club slender, nudum of 22 segments. Palpi short, yellow below. ♂ without a costal fold and no tuft on hind tibiae.

Single species.

stigmaticus. 3 sub-species.

(a). Upf the central and discal dark bands separate. ♂ without, ♀ with 1–3 hyaline apical spots and rarely a dot in space 3. Unh with or without a double black subtornal spot. There are 2 intergrading forms: a dull uniform form: a much brighter yellower form, with sharper markings. ♂ F 23–26 mm.

Sub-sp. **stigmaticus** Mabille 1883: Brazil. Fig Godman & Salvin, ♂ and genitalia: Seitz: Skinner & Williams 1923, ♂ genitalia: Lindsey, etc. 1931, ♂ genitalia: Hayward 1948, ♂ and genitalia.

Synonym. *fumosus* Plötz 1884: Brazil.

B.M. 6 ♂ 7 ♀ Mexico. 3 ♂ Guatemala. 1 ♀ Nicaragua. 1 ♂ Panama. 9 ♂ 6 ♀ Colombia. 5 ♂ 5 ♀ Venezuela. 1 ♂ Trinidad. 2 ♀ Br Guiana. 2 ♀ Lower Amazons. 11 ♂ 5 ♀ Bahia. 2 ♂ Goyaz. 3 ♂ 1 ♀ Matto Grosso. 11 ♂ 12 ♀ S. Brazil. 3 ♂ 1 ♀ Paraguay. 4 ♂ 5 ♀ Argentine.

(b). Above violaceous. Unh lilacine scaling on tornal half of wing. ♀ F 22 mm. ? Aberration.

Sub-sp. **choricus** Schaus 1902: ♀ Paso de San Juan, Mexico.

B.M. None.

(c). Upf central band, through cell to space 2, is broadly conjoined to the discal band in space 2, **Y**-wise: minute hyaline apical dots in spaces 6 and 7, whereas in *stigmaticus* only 3 specimens of males have any hyaline dots at the apex and those only in space 6. ♂ F 22 mm.

Sub-sp. **juncta** nov: ♂ Jamaica: type B.M.

B.M. Only the type.

F.4. DOBERES Godman & Salvin 1895: type *hewitsonius* Reakirt: sole species included was *mexicana* Felder, which is a synonym of *hewitsonius*.

Synonym. *Masices* Godman & Salvin 1895: type *anticus* Plötz: fixed by Lindsey 1925.

Characterised by the hind and mid tibae being spined and the absence of the upper pair of spurs on the hind tibiae. H quadrate, produced at end of vein 4 and more or less concave at end of spaces 4 and 5. F angled inwards from vein 2 to the dorsum. Antennae with a slender club, nudum 25 segments. ♂ without a costal fold and no hair tuft on the hind tibiae.

1 (2). Above pale brown with chestnut brown markings. Palpi long: third segment equal to the second, seen from above. F apex sharp and termen slightly concave below apex. ♂ F 24 mm: ♀ 30 mm.

hewitsonius Reakirt 1866: Mexico. Fig Seitz.

Synonym. *mexicana* Felder 1867: ♀ Mexico: type B.M.: figured.

B.M. 7 ♂ 18 ♀ Mexico. 1 ♂ 1 ♀ "Panama".

2 (1). Above darker, ochreous-brown with broad, dark brown markings. Palpi short, third segment much shorter than the second, seen from above. F termen convex to apex.

anticus. 2 sub-species.

(a). ♂ F 26 mm. Below uniform dark brown, slightly paler on apical half F.

Sub-sp. **anticus** Plötz 1884: Mexico. Fig Seitz.

B.M. 2 ♂ Mexico (Vera Cruz).

(b). ♂ F 32 mm. Apical half unf bright tawny.

Sub-sp. **sobrinus** Godman & Salvin 1895: ♂ Mexico: type B.M.

B.M. 4 ♂ 2 ♀ Mexico (Guerrero. Jalapa). 3 ♂ 1 ♀ Guatemala. 7 ♂ 6 ♀ Costa Rica.

F.5. TIMOCHARES Godman & Salvin 1896: type *trifasciata* Hewitson: fixed by Lindsey 1921.

F cell long = dorsum. Antennae short, club stout, nudum of 18 segments. Palpi longer than width of head: third segment long and stout. ♂ with a costal fold upf and hind tibiae with a hair tuft fitting into a thoracic pouch.

1 (2). Upf central band continuous.
trifasciata. 2 sub-species.
(a). Upf submarginal markings large and faint. ♂ F 23 mm. Occurs in two intergrading forms: light form with uph dull yellow: dark form has uph pale brown.
Sub-sp. **trifasciata** Hewitson 1868: ♀ Bolivia: type B.M. Fig Hewitson 1875: Seitz: Godman & Salvin, ♂ genitalia. Synonyms. *hemula* (Herrich-Schäffer MS) Godman & Salvin 1896.
obscurior Draudt 1925: no loc.: figured. Dark form.
B.M. 22 ♂ 3 ♀ Mexico. 5 ♂ 1 ♀ Guatemala. 8 ♂ 1 ♀ Honduras. 1 ♂ Salvador. 2 ♀ Costa Rica. 4 ♂ Panama. 7 ♂ Colombia. 9 ♂ 3 ♀ Venezuela. 1 ♂ Trinidad. 1 ♂ 3 ♀ Br Guiana. 14 ♂ Peru. 8 ♂ 2 ♀ Bolivia. 8 ♂ 8 ♀ Amazons. 1 ♂ Maranham. 1 ♀ Bahia. 2 ♂ Goyaz. 2 ♂ Minas Geraes. 4 ♂ 1 ♀ S. Brazil. 4 ♂ 3 ♀ Paraguay.
(b). Upf submarginal markings smaller. ♂ F 20 mm. Above, much clearer orange-yellow, brighter and more variegated.
Sub-sp. **sanda** nov: ♂ Tucuman: type B.M. Fig Hayward 1948 as *trifasciata*, ♂ and genitalia.
B.M. 17 ♂ 3 ♀ Argentine.

2 (1). Upf central band broken into separate spots.
ruptifasciata. 2 sub-species.
(a). Generally paler, particularly below. ♂ F 22 mm.
Sub-sp. **ruptifasciata** Plötz 1884: ♂ "S. America". Fig Seitz: Godman & Salvin.
B.M. 12 ♂ Mexico.
(b). Generally darker and constantly much darker below. ♂ F 21 mm.
Sub-sp. **runia** nov: ♂ Jamaica: type B.M.
B.M. 9 ♂ 4 ♀ Jamaica.

F.6. ANASTRUS Hübner 1824: type *obscurus* Hübner: Scudder 1875 stated, incorrectly, that the sole species included was a synonym of *corbulo* Stoll. Actually Hübner on plate 149 (Exot Schmett 2) figured as the ♂ (figs 1 and 2) and the ♀ (figs 3 and 4) the males of two different species. Watson 1893 selected the second species (figs 3 and 4) as representing *obscurus* and as the type of the genus. Hübner's first species (figs 1 and 2) is *Ephyriades philemon* Fabricius.
Synonyms. *Gorgophone* Godman & Salvin 1894: type *meliboea* Godman & Salvin: sole species included.
Echelatus Godman & Salvin 1894: type *sempiternus* Butler & Druce: fixed by Lindsey 1925 as *varius* Mabille, which is a synonym of *sempiternus*.

F cell long = dorsum or nearly so: H costa = dorsum. Antennae short: nudum 20–24 segments: shaft black, minutely, but conspicuously, chequered white in front. Palpi short: below dark brown with an admixture of grey hairs. ♂ with a more or less developed costal fold: hind tibiae with a hair tuft and thoracic pouch in some species. Without hyaline spots.

1a (5a). Upf with more or less conspicuous dark bands.
1b (3a). Below, with at least traces of dark bands.
1 (2). Below, dark markings conspicuous. Unf with a more or less sharply defined yellow spot at apex: ♂ with a very narrow costal fold upf: no tibial tuft. ♂ F 20 mm.

sempiternus. 3 sub-species.
(a). Unh dorsal third bluish-white.

Sub-sp. **sempiternus** Butler & Druce 1872: ♀ Costa Rica: type B.M. Fig Seitz: Godman & Salvin, ♂ and genitalia.
Synonym. *varius* Mabille 1883: ♀ Venezuela: type B.M. Figs by Godman & Salvin and Seitz are of *tolimus*.
B.M. 8 ♂ 5 ♀ Mexico. 11 ♂ 3 ♀ Guatemala. 3 ♂ 1 ♀ Honduras. 2 ♂ 2 ♀ Nicaragua. 3 ♂ 4 ♀ Costa Rica. 7 ♂ Panama. 1 ♂ 2 ♀ Colombia. 2 ♀ Venezuela. 3 ♂ 3 ♀ Ecuador (Paramba). 1 ♀ Amazons.
(b). Unh uniform ochreous-brown with dark bands. Upf an inconspicuous narrow pale band before the narrow dark band along the termen.

Sub-sp. **simplicior** Möschler 1876: ♂ Surinam: figured. Fig Seitz: Hayward 1948, ♂ and genitalia.
Synonyms. *alburnea* Plötz 1884: ♀ Pará.
luctuosa (Hopffer MS) Plötz 1884.
diversus Mabille 1897: ♂ Brazil: type B.M.
B.M. 1 ♂ Venezuela. 1 ♂ 3 ♀ Trinidad. 1 ♂ 1 ♀ Br Guiana. 1 ♀ Fr Guiana. 9 ♂ 2 ♀ Peru (Chanchamayo. Inambari. Marcapata. Ucayali). 7 ♂ Bolivia (Santa Cruz. La Paz). 2 ♂ 6 ♀ Amazons (Fonte Boa, Pará). 1 ♀ Pernambuco. 1 ♀ Ceara. 6 ♂ 2 ♀ Matto Grosso. 17 ♂ 6 ♀ S. Brazil. 5 ♂ 1 ♀ Paraguay.
(c). Upf darker, the pale submarginal band absent. Below central areas bright ochreous.

Sub-sp. **dilloni** Bell & Comstock 1948: ♂ Haiti: genitalia figured.
B.M. 4 ♂ 4 ♀ Haiti. 4 ♂ 2 ♀ Jamaica.

2 (1). Below, dark markings faint, vestigial unf. Above, markings as in *sempiternus*, but fainter. ♂ with fully developed costal fold: no tibial tuft.

tolimus. 2 sub-species.
(a). Unh dorsal third pale blue.

Sub-sp. **tolimus** Plötz 1884: Colombia. Unpublished fig of type in B.M. Fig as *varius* by Seitz and Godman & Salvin.
Synonym. *polyaenus* Mabille 1895: ♂ Colombia: type B.M.
B.M. 2 ♂ Mexico. 2 ♂ 2 ♀ Guatemala. 8 ♂ 2 ♀ Honduras. 1 ♂ Nicaragua. 1 ♂ 2 ♀ Costa Rica. 1 ♂ 2 ♀ Panama. 6 ♂ Colombia. 1 ♂ 2 ♀ Venezuela. 1 ♀ Ecuador. 1 ♂ "Bolivia".
(b). Unh dark ochreous-brown with faint bands.

Sub-sp. **robigus** Plötz 1884: S. America. Fig Seitz (badly): no ocellus in the cell upf is specified in the description.
Synonyms. *patens* Plötz 1884: Rio. Fig Seitz.
subchalybeus Mabille 1891: ♂ Amazons, Manaos.
luctuosus Godman & Salvin 1894: ♂ Mexico: type B.M.: figured ♂ and genitalia.
depenicillus Strand 1920: ♂ Colombia.
B.M. 1 ♂ Mexico. 1 ♂ Colombia. 1 ♂ Venezuela. 1 ♂ 2 ♀ Br Guiana. 1 ♂ Surinam. 2 ♂ 2 ♀ Fr Guiana. 3 ♂

Peru (Perene. Ucayali. Yahuas). 1 ♂ 1 ♀ Bolivia (Buenavista. Reyes). 9 ♂ 8 ♀ Upper Amazons to Obidos. 5 ♂ Pará. 2 ♂ 2 ♀ Bahia. 1 ♂ Maranham. 1 ♀ Minas Geraes. 2 ♂ Matto Grosso. 3 ♂ 3 ♀ S. Brazil. 1 ♂ Argentine.

3a (1b). Below, with no trace of markings. Upf the dark bands broad continuous and oblique, alternating with broad pale bands. ♂ with a costal fold and a tuft on the hind tibiae entering a thoracic pouch. ♂ F 21–22 mm.

3 (4). Above, the pale bands dull light blue. Uph the dark band beyond end cell is curved and continuous from costa to vein 2, separating a pale area at end of cell.

petius. 2 sub-species.

(a). Unh dorsal third of wing bluish-white.

Sub-sp. **peto** nov: ♂ Baños, Guatemala: Dec 1912: A. Hall: type B.M.

B.M. 1 ♂ Guatemala. 2 ♀ Honduras.

(b). Unh dark ochreous-brown, sometimes whitening tornally.

Sub-sp. **petius** Möschler 1876: ♂ Surinam: figured. Fig Seitz.

B.M. 1 ♂ 1 ♀ Colombia. 1 ♂ Venezuela. 3 ♂ Trinidad. 2 ♂ Br Guiana. 5 ♂ Surinam. 6 ♂ 1 ♀ Fr Guiana. 1 ♂ Peru (Chanchamayo). 9 ♂ 8 ♀ Amazons (Teffe. Obidos. Pará). 1 ♂ 1 ♀ Maranham. 1 ♂ 1 ♀ S. Brazil (Rio).

4 (3). Above, the pale bands violet and the oblique dark bands more sharply defined. Uph the dark band beyond end cell centrally broken: upper part is a dark streak directed to mid termen: lower part widely separated and obscure. ♂ F 21 mm.

obliqua Plötz 1884: ? loc. Fig Seitz: Lindsey 1925.

B.M. 1 ♂ 1 ♀ Br Guiana. 1 ♀ Fr Guiana. 5 ♂ 5 ♀ Amazons (Iquitos. Tapajos. Manaos. Obidos. Santarem). 1 ♂ Pernambuco. 1 ♂ 2 ♀ S. Brazil (Rio. Paraná).

5a (1a). Upf dark brown without discal or central bands.

5b (8). Upf with a lilacine or grey area along the outer half of the costa and a band of similar colour parallel to the termen, separated therefrom by a narrow dark band. ♂ upf with a narrow costal fold.

5c (7). Unh never more than the dorsal half is white.

5 (6). ♂ without a tibial tuft. Uph with a broad lilacine discal area extending to the cell, divided by a dark band beyond end cell and a very narrow postdiscal dark band. Above, the lilacine areas F and before the termen H are densely white scaled. ♂ F 22 mm. The specific separation of this species from *obscurus* is somewhat doubtful, as the genitalia are very similar: they were placed in different genera by Godman & Salvin.

meliboea. 2 sub-species.

(a). Unh dorsal half white.

Sub-sp. **meliboea** Godman & Salvin 1894: ♂ Panama: type B.M.: figured. Fig Seitz.

B.M. 1 ♂ 1 ♀ Costa Rica. 1 ♂ 3 ♀ Panama. 1 ♂ Colombia.

(b). Unh ochreous-brown.

Sub-sp. **bactra** nov: ♂ Bolivia, Cochabamba: P. Germain: type B.M.

B.M. 6 ♂ Colombia. 3 ♂ Ecuador (Rio Pastaza). 22 ♂ Peru (Huancabamba. Chaquimayo. Chanchamayo. Inambari. Moyabamba. Pozuzo). 13 ♂ Bolivia (Cochabamba. Yungas, La Paz. Santa Cruz).

6 (5). ♂ with a hair tuft on the hind tibiae fitting into a thoracic pouch. Like *meliboea*, but the white scaling on the lilacine areas reduced or absent.

obscurus. 4 sub-species.

(a). Unh dorsal half white. Cuiller narrow. ♂ F 20 mm.

Sub-sp. **neaeris** Möschler 1878: ♂ Colombia. Fig Seitz: Godman & Salvin, ♂ and genitalia.

B.M. 3 ♂ 1 ♀ Mexico. 5 ♂ 4 ♀ Guatemala. 1 ♀ Honduras. 2 ♂ 5 ♀ Costa Rica. 1 ♂ 1 ♀ Panama. 10 ♂ Colombia. 4 ♂ 4 ♀ Venezuela. 1 ♂ Ecuador (La Chima).

(b). Unh plain ochreous-brown. Above, lilacine areas shining blue and very broad on uph. Cuiller narrow.

Sub-sp. **narva** nov: ♂ Florida, Upper Putumayo: Oct 1931: type B.M.

B.M. 6 ♂ Panama. 5 ♂ Br Guiana. 1 ♂ Surinam. 4 ♂ 4 ♀ Fr Guiana. 2 ♂ Peru (Carabaya). 2 ♂ Bolivia (Reyes. Muschay). 1 ♂ Maranham. 1 ♀ Goyaz. 8 ♂ 2 ♀ Bahia.

(c). Like *narva*, but cuiller twice as broad and uph the lilacine area is restricted to a broad margin.

Sub-sp. **chaqua** nov: ♂ Chaquimayo, S. Peru: 3,000 ft.: July 1910: H. & C. Watkins: type B.M. Fig Seitz as *obscurus*.
B.M. 9 ♂ 1 ♀ Peru (Chaquimayo. Carabaya. Rio Colorado). 2 ♂ Bolivia.
(c). Larger, ♂ F 22 mm. Uph lilacine area restricted to the margin and usually white powdered as in *meliboea*. Cuiller narrow. This form agrees best with Hübner's figures.

Sub-sp. **obscurus** Hübner 1824: no loc.: figured plate 149, figs 3 and 4 (nec 1 and 2, which are *philemon*). Fig Seitz as *neaeris* (upperside only).
B.M. 1 ♂ 1 ♀ Santa Catharina. 1 ♂ Espirito Santo. 1 ♀ Paraná. 1 ♀ Rio. 2 ♂ 1 ♀ "Brazil".

7 (5c). Unh entirely covered with white scaling. Unf apex white tipped. Above pale areas grey scaled, no lilacine colouring. ♂ hind tibiae without a hair tuft. ♂ F 20 mm.

ulpianus Poey 1832: ♂ Brazil. Fig Seitz.
Synonyms. *labeo* Poey 1832: ♀ Brazil.
austera Prittwitz 1868: ♂ Corcovado.
rossine Butler 1870: ♂ Brazil: type B.M.
B.M. 1 ♂ 1 ♀ Minas Geraes. 35 ♂ 18 ♀ S. Brazil (São Paulo. Theresopolis. Santa Catharina. Petropolis. Espirito Santo).

8 (5b). Above, unmarked dark brown. Below, dark brown: unf paler before termen: unh with a broad submarginal ochreous band tapering to a point at the costa. ♂ F 21 mm. ♂ with a well-developed costal fold. The type is without a head or legs. Wing shape and venation agree with *obscurus*.

peruvianus Mabille 1883: ♂ Peru: type B.M. Fig Mabille & Vuillot 1893, but the figure shows some blue colouring above, whereof no mention is made in the description.
B.M. Only the type.

F.7. TOSTA Evans (p. 170 ante): type *tosta* Evans described below): fixed by author.

A genus of 5 species allied to *Anastrus* and *Achlyodes*, differing in the very short cell F and the rounded, evenly convex termens F and H. Palpi short. Antennal shaft plain, club slender: nudum 21–24 segments.

1a (4a). Upf with alternating pale and dark bands.
1b (3). ♂ upf no costal fold.
1 (2). Upf the pale bands violaceous: dark bands basal, central, discal and submarginal. Uph dark brown with a violaceous spot at end cell and a smaller one at base cell. Unf brown with faint central and discal dark bands. Unh with faint central, discal and submarginal dark bands and a large tornal black spot. ♂ hind tibiae with a hair tuft entering a thoracic pouch: unh with a brown brand at base of the hunched costa (as in *Achlyodes busirus*) correlated to a speculum at base unf and an upturned tuft of black hairs from base of cubitus. ♂ F 18 mm.
tosta nov: ♂ Iquitos: Stuart: type B.M.
B.M. 1 ♂ Colombia. 1 ♂ Iquitos.

2 (1). Upf pale bands not violaceous. Uph with 3 dark basal spots, discal and submarginal bands. Below, paler, bands as above: unf pale spot at apex: unh dorsal half paler, no tornal black spots. ♂ no secondary sexual characters. ♂ F 18 mm. Described in *Ouleus*.
gorgus Bell 1937: ♂ Br Honduras: clasp figured.
B.M. None.

3 (1b). ♂ upf with a white-centred costal fold. Upf the pale bands ochreous-brown, cut by dark veins. Uph ochreous bar at end cell and a narrow discal band. Unf with faint bands. Unh ochreous bar at end cell and 3 spots below it, also a discal macular band. Legs missing. ♂ F 20 mm.
platypterus Mabille 1895: ♂ Honduras: type B.M.
B.M. 1 ♂ Honduras. 1 ♀ Nicaragua. 2 ♀ Panama.

4a (1a). Upf plain dark brown, without markings.
4 (5). Below, no dark bands. Unh costal half dark brown, dorsal half turning paler and veins darkened. ♂ with costal fold: no tibial tuft. ♂ F 20 mm.
niger Williams & Bell 1940: ♂ Colombia: genitalia figured.
B.M. 1 ♂ Colombia (Cundinamarca).

5 (4). Below with faint discal and submarginal dark bands F, central and discal H, on a brown ground, purple washed. Above, dark brown, purple washed: uph with faint dark bands. ♂ with a costal fold, internally white: no tibial tuft. ♂ F 18 mm.

taurus nov: ♂ Peru, Moyabamba: first quarter 1887: M. de Mathan: type B.M.
B.M. Only the type.

F.8. EBRIETAS Godman & Salvin 1896: type *osyris* Staudinger: fixed by author.

Wings produced: F costa half as long again as the dorsum: H dorsum > costa. F vein 11 ends over end of cell. Antennal apiculus pointed, nudum 19 segments. Palpi porrect, long. ♂ with costal fold and, in some species, a hair tuft on hind tibiae in conjunction with a pouch at end of thorax. Markings composed of solid bands.

1a (5a). Hind tibiae with a hair tuft.
1b (4). Large, ♂ F 22–25 mm.
1c (3). F not (or only faintly) with termen concave before apex. Right clasp undivided.
1 (2). Unh tornal area broadly bright yellow.

osyris Staudinger 1876: ♂ Chiriqui. Fig Staudinger: Seitz: genitalia by Godman & Salvin: figures by Hayward 1948 are of *badia*.
B.M. 2 ♂ Mexico. 9 ♂ Guatemala. 2 ♂ Nicaragua. 5 ♂ Costa Rica. 7 ♂ Panama. 12 ♂ Colombia (Bogotá. Parida). 3 ♂ Venezuela. 1 ♂ Ecuador. 1 ♂ Amazons.

2 (1). Unh tornal area varying from dull brown to light brown: the discal dark band generally broader than the submarginal band.

infanda Butler 1876: ♂ Amazons: type B.M. Figs by Lindsey 1925 and Seitz are of *badia*.
Synonyms. *perfidus* Mabille 1883: ♂ Brazil: type B.M.
obscurior Hayward 1933: ♂ Argentine: figured.
isus (Mabille MS) Godman 1907 (Ann Mag Nat Hist 7/20: 148) in reference to unpublished fig by Plötz of *Antigonus tortricinus* Plötz ♀.
B.M. 8 ♂ Colombia (Bogotá. Rio Caqueta). 1 ♂ Br

Guiana. 1 ♂ 3 ♀ Fr Guiana. 4 ♂ Ecuador (Curarai. Sarayacu. R. Napo). 33 ♂ Peru (Chanchamayo. Perene. Chaquimayo. Carabaya). 10 ♂ Bolivia (Cochabamba. La Paz. Rio Songo. Santa Cruz). 19 ♂ Upper Amazons (Pebas. Ega. Iquitos. Ucayali. Rio Madeira. S. Paulo de Olivenca. Upper Putumayo). 6 ♂ 2 ♀ Pará. 1 ♂ Minas Geraes. 10 ♂ S. Brazil (Rio. Espirito Santo). 6 ♂ Paraguay.

3 (1c). F termen conspicuously concave below apex. Right clasp bifid. Unh yellowish-brown with the bands faint and the discal band generally no wider than the submarginal band.

badia Plötz 1884: ♂ Chanchamayo. Fig by Seitz and Lindsey 1925, ♂ and genitalia, as *infanda*: by Hayward 1948, ♂ and genitalia, as *osyris*.

B.M. 2 ♂ Costa Rica. 1 ♂ Panama. 20 ♂ Colombia (Cauca. Bogotá. Manizales. Rio Chili. Chaco). 1 ♂ Venezuela. 22 ♂ 1 ♀ Ecuador (Rio Pastaza. Zamora. Balzapamba. Sarayacu. Ambato). 38 ♂ 1 ♀ Peru (Chanchamayo. Perene. Pozuzo. Huancabamba. Carabaya). 7 ♂ Bolivia (Coroico. La Paz). 1 ♂ Bahia.

4 (1b). Small, ♂ F 18 mm.

anacreon. 3 sub-species.

(a). Unh tornal area paler brown, but not white.

Sub-sp. **anacreon** Staudinger 1876: ♂ Brazil. Fig Godman & Salvin, ♂ and genitalia: Seitz: Hayward 1948, ♂ and genitalia.

Synonyms. *albunea* (Prittwitz MS) Staudinger 1876.
ecliptica Butler 1877: ♂ Amazons: type B.M. Fig by Godman & Salvin *evanidus*. Fig Seitz.
tortricinus Plötz 1884: ♂ Panama.
undulata Plötz 1884: ? loc. Fig Seitz.
halidus Mabille 1891: ♂ Merida.

B.M. 34 ♂ 5 ♀ Mexico. 11 ♂ 1 ♀ Guatemala. 1 ♂ 1 ♀ Honduras. 1 ♂ Salvador. 5 ♂ 1 ♀ Nicaragua. 5 ♂ Costa Rica. 6 ♂ 2 ♀ Panama. 22 ♂ 2 ♀ Colombia. 9 ♂ 1 ♀ Venezuela. 4 ♂ 1 ♀ Trinidad. 2 ♂ Ecuador (Zamora). 10 ♂ 1 ♀ Peru (Chanchamayo. Perene. Carabaya). 11 ♂ 1 ♀ Bolivia. 5 ♂ 1 ♀ Pará. 3 ♂ 1 ♀ Bahia. 4 ♂ Goyaz. 7 ♂ 1 ♀ Minas Geraes. 7 ♂ Matto Grosso. 19 ♂ 1 ♀ S.

Brazil (Rio. Paraná. Novo Friborgo). 20 ♂ 1 ♀ Paraguay. 6 ♂ Argentine.

(b). Unh tornal area sordid white crossed by dark bands.

Sub-sp. **triseriata** Plötz 1884: ♂ Venezuela. Fig Seitz.

B.M. 27 ♂ Colombia (R. Dagua. Popoyan. Cauca. Cali. Jimenez).

(c). Unh tornal area clear white, unmarked by dark bands.

Sub-sp. **leucophaea** Mabille & Boullet 1917: ♂ Ecuador.

B.M. 18 ♂ Ecuador (Paramba. Loja).

5a (1a). H tibiae without a hair tuft.

5 (6). Unh tornal area purple-brown, dark bands, conspicuous. ♂ F 20 mm.

evanidus Mabille 1897: ♂ Bolivia. Fig Seitz: Godman & Salvin, ♂ and genitalia as *ecliptica*.

Synonym. *morio* Mabille & Boullet 1917: ♂ Ecuador: type B.M.

B.M. 2 ♂ Mexico. 7 ♂ Guatemala. 2 ♂ Honduras. 1 ♂ Nicaragua. 6 ♂ Costa Rica. 3 ♂ Panama. 14 ♂ 1 ♀ Colombia. 4 ♂ Venezuela. 1 ♂ 1 ♀ Br Guiana. 2 ♂ Ecuador. 4 ♂ Peru (Tingo Maria. Rio Ampyam). 19 ♂ 1 ♀ Upper Amazons (Iquitos. Pebas. Ega).

6 (5). Unh tornal area not purple-brown, bands faint. ♂ F 18 mm.

elaudia. 2 sub-species.

(a). Unh tornal area white.

Sub-sp. **elaudia** Plötz 1884: ♂ Laguayra.

Synonym. *claudia* Draudt 1923: misprint: figured.

B.M. 1 ♂ Panama. 24 ♂ Colombia (Bogotá. Manaure. Onaca, St Marta). 6 ♂ Venezuela.

(b). Unh tornal area pale brown.

Sub-sp. **livius** Mabille 1897: ♂ Bolivia.

Synonym. *minor* Mabille & Boullet 1917: ♂ Peru.

B.M. 8 ♂ Ecuador (Loja. Rio Numbala). 4 ♂ Peru (La Merced. Rio Tabaconas). 4 ♂ Bolivia (Yungas). 2 ♂ Bahia.

F.9. CYCLOGLYPHA Mabille 1903: type *thrasibulus* Fabricius: fixed by Lindsey 1925.

F costa and tornus strongly convex: typically termen is concave below the apex: costal area broader than cell: veins, 12, 11, 10 short, latter ending over end of the cell. Antennae rather blunt at tip: nudum 17 segments. Palpi moderately long. Upf pattern very complex, consisting of narrow irregular markings. ♂ upf with a costal fold: most species have a hair tuft on the hind tibiae, in conjunction with a pouch at the end of the thorax: four species have a brand uph at the base, between the cell and the costa, which is hunched and furnished with a black hair tuft: in conjunction with the brand there is a speculum unf.

1a (5a). ♂ uph with a brand and a speculum unf.

1b (3a). ♂ hind tibiae with a hair tuft.

1 (2). ♂ uph glandular area dark grey-brown: unf the speculum small, not extending across cell. Upf markings in form of ring spots. ♂ F 17 mm.

thrasibulus. 2 sub-species.

(a). With 2 seasonal forms. WSF upf dark, with faint markings: unh uniform dark purple-brown, markings faint. DSF (*lucida*) upf the ring spots conspicuous: unh much paler brown, especially towards tornus, markings conspicuous.

Sub-sp. **thrasibulus** Fabricius 1793: Indiis: fig in Jones Icones. Fig Seitz: Hayward 1948, ♂ and genitalia.

Synonyms. *lucida* Mabille & Boullet 1917: ♂ Honduras: paler dry season form.

florita Zikan 1938: ♂ Itatitaya, S. Brazil.

B.M. 12 ♂ 3 ♀ Mexico. 6 ♂ 3 ♀ Guatemala. 4 ♂ 2 ♀ Nicaragua. 3 ♂ 2 ♀ Costa Rica. 2 ♂ 2 ♀ Panama. 14 ♂ 2 ♀ Colombia. 1 ♂ Venezuela. 3 ♂ Trinidad. 3 ♀ Br Guiana. 1 ♂ 2 ♀ Surinam. 5 ♂ 7 ♀ Fr Guiana. 14 ♂ 2 ♀ Peru. 4 ♂ 1 ♀ Bolivia. 5 ♂ Upper Amazons. 9 ♂ 9 ♀ Pará. 1 ♂ 1 ♀ Bahia. 2 ♂ 2 ♀ Minas Geraes. 5 ♂ Matto Grosso. 13 ♂ 6 ♀ S. Brazil. 5 ♂ 3 ♀ Paraguay.

(b). ♂ ♀ unh tornal third of wing white with dark submarginal spots.

Sub-sp. **flinta** nov: ♂ Paramba, Ecuador: type B.M.

B.M. 5 ♂ 1 ♀ Ecuador (Paramba. Loja. Ambato). 1 ♂ N. Peru (Ayabaca Mts.).

2 (1). ♂ uph glandular area yellow: unf speculum large, extending across the cell. Upf the markings not ringed.

Two seasonal forms, less conspicuously differentiated. Unh markings fainter, ♂ F 18 mm.

tisias Godman & Salvin 1896: ♂ Costa Rica: figured: type B.M. Fig Seitz.
B.M. 1 ♂ Costa Rica. 1 ♂ Panama. 8 ♂ Colombia. 1 ♂ Trinidad. 1 ♂ Br Guiana. 1 ♂ Fr Guiana. 2 ♂ Ecuador (Balzapamba). 15 ♂ Peru. 4 ♂ 1 ♀ Bolivia. 7 ♂ Upper Amazons (Iquitos). 1 ♀ Maranham. 1 ♂ 1 ♀ Minas Geraes. 20 ♂ 1 ♀ S. Brazil.

3a (1b). ♂ without a hair pencil on the hind tibiae: ♂ uph the glandular area dark grey: unf the speculum wide, extending across the cell. Upf with very irregular ring spots, but not so conspicuous as in *thrasibulus*. ♂ F 17 mm.
3 (4). Right clasp with the end of the cuiller rectangular: left clasp with a projecting style. Upf markings comparatively broad and always visible on uph.

caeruleonigra Mabille 1904: "Fr Guiana": type B.M. (marked Ecuador on label).
Synonym. *blanchardi* Hayward 1939: ♂ Peru (Puyo Oriente): genitalia figured.
B.M. 2 ♂ Cuernavaca (coll Felder). 5 ♂ Colombia. 1 ♂ Venezuela. 1 ♂ Ecuador (type). 5 ♂ Peru (Chanchamayo. R. Maranon. Carabaya). 7 ♂ Upper Amazons (Iquitos. Upper Putumayo). 3 ♂ Minas Geraes. 1 ♂ Rio. 1 ♂ Paraná. 2 ♂ Paraguay.

4 (3). Right clasp, end of cuiller circular: left clasp without a style. Darker. Upf markings narrower: at apex with a row of black dots in spaces 6–10. Uph black, markings absent or very faint. Unh darker.

stellita Zikan 1938: ♂ Virginia, Sul de Minos, S. Brazil.
B.M. 1 ♂ Minas Geraes. 5 ♂ Paraná. 1 ♂ Novo Friborgo. 1 ♂ Theresopolis. 1 ♂ Rio.

5a (1a). ♂ uph without a brand and no speculum unf: costal fold upf and hair tuft on hind tibiae present.
5 (6). Upf and basal half uph with complex irregular narrow bluish markings on a black ground. Unh tornal area paler, ochreous-brown in ♂, nearly white in ♀. ♂ F 17 mm.

enega Möschler 1876: ♂ Surinam: figured.

Synonym. *cataphanes* Mabille 1904: ♂ Brazil: type B.M.
B.M. 2 ♂ 2 ♀ Nicaragua. 3 ♂ Colombia. 1 ♂ Br Guiana. 3 ♂ Ecuador (Paramba). 14 ♂ Peru (Chanchamayo. Pozuzo. Marcapata. Carabaya. Chaquimayo). 10 ♂ Bolivia (Mapiri. Reyes. Yungas, La Paz. Cochabamba). 6 ♂ 4 ♀ Brazil (Pará. Bahia. Iquitos. Teffe. Rio. Santa Catharina).

6 (5). Upf with more regular greyish markings, recalling *Helias*, a central dark band and a regular macular discal band. Uph violet-grey scaled at base: faint central and discal dark bands and a bar at end of cell. Unf apex with broad white scaled area to vein 7: a continuous narrow dark discal band angled at vein 6. Unh tornal half of wing brownish-white with faint discal and submarginal dark bands. Palpi long: grey below. ♂ F 15 mm. Antennae damaged.

polax nov: ♂ Chapada, Matto Grosso: H. H. Smith: type B.M.
B.M. Only the type.

F.10. HELIAS Fabricius 1807: type *phalaenoides* Fabricius: sole species included.

Synonyms. *Achna* Billberg 1820: *n. n. pro Helias* Fabricius. *Diphoridas* Godman & Salvin 1896: type *phalaenoides* Fabricius: fixed by author.

F costa conspicuously convex: termen concave just below apex and in space 1b: vein 11 ends over end of cell. H concave at end of spaces 4–5 and 1b. Antennae short: nudum 15: apiculus blunt and flattened. Palpi very long and pendulous. ♂ no costal fold: hind tibiae with a hair tuft entering a pouch at end of thorax.

Single species.

phalaenoides. 4 sub-species.

(a). Upf central dark band dislocated on vein 2, portion in space 1b shifted inwards. Unh uniform brown, complete dark markings, tornal half with a bluish gloss. Right clasp slightly bilobed at end. ♂ F 15 mm.

Sub-sp. **cama** nov: ♂ Mexico: type B.M. Genitalia fig by Godman & Salvin as *phalaenoides*.

B.M. 21 ♂ 1 ♀ Mexico. 15 ♂ 1 ♀ Guatemala. 3 ♂ 1 ♀ Honduras. 4 ♂ 2 ♀ Nicaragua. 4 ♂ 1 ♀ Panama. 8 ♂ 1 ♀ Colombia.

(b). Upf as *cama*. Unh tornal half white, dark discal band on the white area narrow and faint: border beyond the outer dark band is darkened. Right clasp undivided. ♂ F 15 mm.

Sub-sp. **godmani** Mabille & Boullet 1917: ♂ Ecuador: type B.M. Fig Godman & Salvin, ♂ and genitalia as *palpalis*.

B.M. 6 ♂ Panama. 4 ♂ 3 ♀ Colombia. 23 ♂ 7 ♀ Ecuador (Paramba). Sub-specific in Ecuador: seasonal elsewhere.

(c). Upf the central dark band continuous. Unh varies seasonally from uniform brown to the tornal half being sullied white with faint dark bands: border not darkened and the discal band better marked than the outer band. ♂ above, the lighter area more or less conspicuously shining blue. Right clasp bifid at end. ♂ F 15 mm.

Sub-sp. **phalaenoides** Fabricius 1807: no loc (Surinam assumed). Fig Hübner 1812: Seitz.

B.M. 4 ♂ Panama. 2 ♂ 4 ♀ Venezuela. 3 ♂ 2 ♀ Trinidad. 2 ♂ Tobago. 3 ♂ 9 ♀ Br Guiana. 2 ♂ 1 ♀ Surinam. 6 ♂ 1 ♀ Fr Guiana. 2 ♂ Ecuador. 11 ♂ 1 ♀ Peru (R. Tabaconas. R. Maranon. Huancamayo. Chanchamayo). 11 ♂ Upper Amazons (Teffe. Iquitos. Ega. Obidos). 11 ♂ 11 ♀ Pará. 10 ♂ 3 ♀ Bolivia (Santa Cruz. Reyes. Buenavista. Cochabamba).

(d). As *phalaenoides*, but larger, ♂ F 17 mm. and upf blue colouring absent. Above, the grey band inside the dark central band is conspicuous.

Sub-sp. **palpalis** Latreille 1823: ♂ Brazil. Fig Seitz: Hayward 1948, ♂ and genitalia as *phalaenoides*.

Synonyms. *aura* Plötz 1884: ♂ Brazil.

albescens Mabille & Boullet 1917: ♂ Brazil.

B.M. 4 ♂ 4 ♀ Bahia. 4 ♂ 1 ♀ Ceara. 8 ♂ 6 ♀ Minas Geraes. 12 ♂ 4 ♀ Matto Grosso. 35 ♂ 12 ♀ S. Brazil. 9 ♂ 3 ♀ Paraguay. 1 ♂ Uruguay. 5 ♂ 2 ♀ Argentine.

F. 11. CAMPTOPLEURA Mabille 1877: type *theramenes* Mabille: fixed by Kirby 1879 (Zool. Record 14: 139).

Antennae with slender club, nudum of 19 segments. Palpi long. F vein 12 turned up at end: vein 11 ends over end of cell. Wings rounded, not produced: F "hollow", batwing. ♂ generally with a narrow costal fold: hind tibiae with a hair tuft fitting into a thoracic pouch.

1a (5). Below, palpi and pectus white or whitish.

1b (3a). Uph with bluish scaling and broken markings. ♂ with costal fold.

1 (2). Large, ♂ F 20 mm. F origin of vein 7 much farther from termen than from the origin of vein 12.

theramenes Mabille 1877: ? loc: type B.M. figured. Fig Seitz: Hayward 1948, ♂ and genitalia.

B.M. 7 ♂ Mexico. 1 ♂ Honduras. 1 ♂ 1 ♀ Costa Rica. 2 ♂ Colombia. 1 ♀ Venezuela. 2 ♂ Peru (Rio Colorado. Huanco). 11 ♂ 1 ♀ Bolivia (Santa Cruz). 6 ♂ Amazons (Iquitos. Ucayali. S. Paulo de Olivenca. Pará). 4 ♂ 5 ♀ Brazil (Espirito Santo and no loc).

2 (1). Small, ♂ F 18 mm. F origin of vein 7 midway between termen and origin of vein 12.

auxo Möschler 1878: ♂ Colombia.

Synonyms. *cincta* Mabille & Boullet 1917: ♂ Bolivia. *indecora* Hayward 1937: ♂ Misiones, Argentine. Fig Hayward 1948, and genitalia.

B.M. 1 ♂ Guatemala. 2 ♂ Panama. 2 ♂ 2 ♀ Colombia. 1 ♂ 1 ♀ Br Guiana. 4 ♂ Fr Guiana. 1 ♂ Ecuador (Paramba). 6 ♂ Peru (Yahuarmayo. R. Perene. Loreto). 3 ♂ Bolivia (Yungas, La Paz. Santa Cruz). 15 ♂ Amazons (Iquitos to Pará). 1 ♀ Bahia. 1 ♂ Minas Geraes. 7 ♂ Matto Grosso. 10 ♂ 1 ♀ S. Brazil (Rio. Paraná). 4 ♂ Paraguay.

3a (1b). Uph without bluish scaling and with continuous dark bands.

3 (4). Upf with a conspicuous triangular black area. ♂ without a costal fold. ♂ F 17 mm.

impressus Mabille 1889: Chiriqui: figured. Fig Seitz: Godman & Salvin, ♂.

B.M. 1 ♂ Panama. 2 ♂ Colombia. 1 ♂ Ecuador (R. Napo). 1 ♂ Fr Guiana. 2 ♂ Upper Amazons (Iquitos). 1 ♂ Pará (bred on Citrus). 1 ♂ Minas Geraes.

4 (3). Above and below very pale: upf no central dark area: ♂ with a costal fold. ♂ F 18 mm.

termon Hopffer 1874: ♂ Chanchamayo.

Synonyms. *iphicrates* Mabille 1878: Fr Guiana: type B.M.

strigulosa (Staudinger MS) Mabille 1903.

B.M. 2 ♂ Colombia. 1 ♂ Venezuela. 1 ♂ Fr Guiana. 8 ♂ Ecuador (Zamora. Ambato. R. Pastaza). 21 ♂ Peru (Chanchamayo. R. Tabaconas. Charape. Cuzco. Amazonas. Huanco. Marcapata). 10 ♂ Bolivia (Cochabamba. Coroico).

5 (1a). Below palpi and pectus brown. Above, black, markings barely visible. Below, dark brown with a purple gloss, markings faint. ♂ F 19 mm.: with a costal fold.

janthinus Capronnier 1874: ♂ Botefago, Upper Madeira River, Amazonas, Brazil: figured.

Synonym. *ebenus* Mabille 1883: ♂ ? loc: type B.M.

B.M. 1 ♂ Br Guiana. 1 ♂ Minas Geraes. 18 ♂ S. Brazil (Santa Catharina. Espirito Santo. Rio).

F.12. THEAGENES Godman & Salvin 1896: type *albiplaga* Felder: fixed by authors as *aegides* Herrich-Schäffer, which is a sub-species of *albiplaga*.

Synonym. *Eropus* Godman & Salvin 1891: type as for *Theagenes*: homonym (Grenville 1895).

Differs from *Camptopleura* in having a shorter, flattened antennal club, nudum 14, and from *Chiomara* in the acutely truncate F apex to vein 5, the truncated portion being concave. ♂ with a costal fold: hind tibiae with a hair pencil fitting into a thoracic pouch. Palpi long. ♂ F 20 mm.

1 (2). Uph with a conspicuous white central area. F costa concave before apex.

albiplaga. 2 sub-species.

(a). Uph central white area reaches costa. Unh the white area sullied with brown scales, but reaches costa.

Sub-sp. **aegides** Herrich-Schäffer 1869: no loc. Fig Seitz: Godman & Salvin, ♂ and genitalia.

B.M. 15 ♂ 2 ♀ Mexico. 12 ♂ 4 ♀ Guatemala. 1 ♂ Salvador. 4 ♂ 4 ♀ Costa Rica. 11 ♂ 1 ♀ Panama.

(b). Uph central white area not reaching costa. Unh the white area sharply defined, unsullied and not extending above vein 6 or the cell.

Sub-sp. **albiplaga** Felder 1867: ♂ Venezuela: type B.M.: figured. Fig Staudinger 1888: Seitz: Hayward 1948, ♂ and genitalia.

B.M. 28 ♂ 2 ♀ Colombia. 17 ♂ Venezuela. 27 ♂ 1 ♀ Ecuador (Loja. Baños. Ambato. Santa Inez). 28 ♂ Peru (Chanchamayo. Huancabamba. Inambari. Pozuzo). 14 ♂ Bolivia (Coroico. Cochabamba. Yungas, La Paz). 2 ♂ Minas Geraes. 2 ♂ 2 ♀ Argentine.

2 (1). Uph with a broad dusky ochreous area, traversed by a dark macular band. Unh tornal area broadly white. Genitalia very like *albiplaga*.

dichrous Mabille 1878: ♂ E. Brazil: type B.M. Fig Hayward 1948, ♂ and genitalia.

B.M. 44 ♂ 12 ♀ S. Brazil (Rio. Paraná. São Paulo. Theresopolis. Novo Friborgo). 1 ♂ Uruguay. 4 ♂ 4 ♀ Argentine.

F.13. CHIOMARA Godman & Salvin 1894: type *mithrax* Möschler: fixed by authors.

The species assembled here differ considerably inter se in venation, wing shape and other characters, as indicated in the key. They are brought together because of the antennal apiculus being "blunt" instead of "sharp", differing from the long, slender apiculus of *Camptopleura* and resembling rather the more pointed of the variations that occur in *Erynnis*. As in *Camptopleura* vein 12 is short, ending before or over the origin of vein 3. The apex F is not sharply truncate as in *Theagenes*. All the males have a hair tuft on the hind tibiae, correlated with the usual thoracic pouch.

1a (3a). Uph with a large white area. ♂ has no costal fold.

1 (2). Unf with conspicuous white markings. F costal veins arranged abnormally: veins 11 and 12 are short and

straight: vein 10 ends over end of cell. Palpi rather short. Antennal nudum of only 14 segments.

asychis. 7 sub-species.

(a). Cuiller of left clasp quadrate. Uph basal third unmarked black and the outer edge straight: central white area narrow. ♂ F 15 mm.

Sub-sp. **georgina** Reakirt 1868: Mexico. Fig in Seitz as *asychis*: fig by Holland is of *asychis*.

Synonym. *pelagica* Weeks 1891: ♂ Lower California.

B.M. 24 ♂ 6 ♀ Mexico. 9 ♂ 4 ♀ Guatemala. 3 ♂ 1 ♀ Honduras. 2 ♂ Nicaragua. 1 ♀ Salvador. 4 ♂ Costa Rica.

(b). Cuiller of left clasp beaked. ♂ uph basal black area indented by the central white area. Upf white areas extensive and not sharply defined. Uph white spots in space 7 conspicuous and of equal size. ♂ F 15 mm.

Sub-sp. **simon** nov: ♂ Colombia, Puebla Viejo: type B.M.

B.M. 8 ♂ 5 ♀ Panama. 10 ♂ 4 ♀ Colombia. 12 ♂ 7 ♀ Venezuela. 3 ♂ 1 ♀ Trinidad.

(c). As *simon* but larger, ♂ F 16 mm., and darker: upf white marking narrower and more sharply defined: uph spots in space 7 smaller and the outer spot less well marked.

Sub-sp. **asychis** Stoll 1780: ♂ Surinam: figured. Fig by Hayward 1948 is of *autander*.

Synonyms. *dilucida* Möschler 1878: ♀ Surinam. Fig Seitz. *palica* Mabille 1888: ♀ Pebas: figured.

B.M. 4 ♂ 5 ♀ Br Guiana. 5 ♂ 2 ♀ Surinam. 3 ♀ Fr Guiana. 8 ♂ 8 ♀ Pará.

(d). Clasp as in *asychis*: ♂ F 17 mm. Upf entirely grey mottled except a narrow white patch mid costa and the apical dots. Uph as *asychis*, but with a terminal row of sharply marked white spots: discal spots more conspicuous and are conjoined to the central white area at their upper end.

Sub-sp. **zania** nov: ♂ Peru, Amazonas, Chachapoyas: M. de Mathan 1889: type B.M.

B.M. 1 ♂ Ecuador (Loja). 2 ♂ N.W. Peru, Vina. 1 ♂ type.

(e). Cuiller of left clasp triangular. ♂ F 15 mm. Upf greyer than *asychis*, due to reduction of the central white area. Uph central white area reduced to a band with a white spot on either side.

Sub-sp. **autander** Mabille 1891: Argentine. Fig Hayward 1948, ♂ and genitalia as *asychis*.
B.M. 1 ♂ Peru (Tarapote). 7 ♂ 3 ♀ Bolivia (Santa Cruz. Chulumani. Santiago del Estero). 3 ♂ 2 ♀ Amazons (Santarem). 9 ♂ 1 ♀ Bahia. 2 ♂ Pernambuco. 1 ♂ Minas Geraes. 16 ♂ Matto Grosso. 9 ♂ 3 ♀ S. Brazil (Rio. Paraná. São Paulo. Santa Catharina). 19 ♂ 5 ♀ Paraguay. 15 ♂ 15 ♀ Argentine.
(f). W. Indian specimens have the dark markings much darker, contrasting strongly with the pale areas. In St Vincent, upf outer half entirely dark and in ♀ the whole wing may be dark. Uph basal area uniformly dark to mid cell. Unh with postdiscal and submarginal dark spots. ♂ F 17 mm.

Sub-sp. **vincenta** nov: ♂ St Vincent: type B.M.
B.M. 5 ♂ 2 ♀ St Vincent.
(g). Much paler. Uph the white central area penetrates into the dark basal area. Unh postdiscal dark spots absent. ♂ F 17 mm.

Sub-sp. **grenada** nov: ♂ St Georges, Grenada: type B.M.
B.M. 1 ♂ St Lucia. 5 ♂ 1 ♀ Grenada. 3 ♂ 2 ♀ Grenadines (Union Is. Mustique Is.).

2 (1). Unf dark grey, unmarked: no hyaline apical spots. Upf whitish areas shaded. Uph central white area sullied, outer dark border broad. Palpi long. Nudum of apiculus 18. ♂ F 18 mm.

khalili Riley 1934: ♂ Abuna, Amazonas, tributary of Rio Madeira near border of Matto Grosso: type B.M.
B.M. 5 ♂ 2 ♀ type loc.

3a (1a). Uph no white area.
3b (5). Unh no white area. ♂ no costal fold.
3 (4). Upf with a more or less distinct row of dark spots near base from costa to dorsum. Palpi short. ♂ F 19 mm. Antennal nudum 16.

mithrax Möschler 1878: ♂ Colombia. Fig Seitz: Hayward 1948, ♂ and genitalia: Godman & Salvin, ♂ and genitalia.
Synonyms. *noctula* Plötz 1884: ♂ Pará.
gundlachi Skinner & Ramsden 1923: ♀ Cuba.
selma (Hewitson MS) Kirby 1879.

B.M. 9 ♂ 5 ♀ Mexico. 3 ♂ Guatemala. 1 ♂ Honduras. 1 ♂ Nicaragua. 1 ♂ 2 ♀ Costa Rica. 1 ♂ 1 ♀ Panama. 12 ♂ 7 ♀ Venezuela. 1 ♂ 2 ♀ Trinidad. 1 ♂ Cuba. 2 ♂ Br Guiana. 1 ♂ Surinam. 2 ♂ 2 ♀ Fr Guiana. 2 ♂ Ecuador (Zamora). 2 ♂ Peru (Carabaya). 3 ♂ Bolivia (Santa Cruz). 18 ♂ 4 ♀ Amazons (Iquitos to Pará). 1 ♀ Pernambuco. 2 ♂ Minas Geraes. 2 ♂ 1 ♀ Matto Grosso. 15 ♂ 7 ♀ S. Brazil. 1 ♂ Paraguay. 2 ♀ Argentine.

4 (3). Upf with a conspicuous isolated black spot near base of space 1b. Apex F very rounded. Palpi long. Nudum on apiculus 15 segments. ♂ F 18 mm.

punctum Mabille 1878: ♂ Cayenne: type B.M. Fig Seitz.
Synonyms. *basigutta* Plötz 1884: S. America.
silvia Mabille 1897: ♂ Brazil: type B.M.
marthona Schaus 1902: ♂ Peru.

B.M. 9 ♂ 7 ♀ Venezuela. 1 ♂ 1 ♀ Br Guiana. 2 ♂ Surinam. 3 ♂ Fr Guiana. 1 ♂ 1 ♀ Peru. 6 ♂ Bolivia (Chulumanni. Tanampaya). 6 ♂ 12 ♀ Amazons (Tapajos to Pará). 6 ♂ 6 ♀ N. Brazil (Bahia. Ceara). 4 ♂ 4 ♀ Goyaz. 7 ♂ 3 ♀ Matto Grosso. 17 ♂ 3 ♀ S. Brazil. 1 ♀ Paraguay.

5 (3b). Unh dorsal third white. Generally resembles *Theagenes dichrous*, but the apex F is very rounded as in *punctum*. ♂ with narrow costal fold: genitalia different to rest of group and give no clue to generic location. Upf markings broken, defying description, near *dichrous*. Uph with alternating ochreous-brown and brown bands, more irregular than in *dichrous*, also with conspicuous spots along termen. Unf with numerous yellowish spots and no bands: the discal spots continued round apex to space 10: dorsum white. Unh the irregular dark bands with pale centres. Palpi long. Antennal nudum 14 segments. ♂ F 17 mm.

crenda nov: ♂ Castro, Paraná: type B.M.
B.M. 3 ♂ type loc.

F.14. GESTA Evans (p. 171 ante): type *gesta* Herrich-Schäffer: specified by author.

The species associated here are intermediate between the genera *Erynnis* and *Chiomara*. In venation they resemble

Erynnis in that vein 12 F is straight and ends on the costa over the origin of vein 4. In wing shape they have the curved costa and convex termen of *Chiomara*. All the males have a tuft on the hind tibiae entering a pouch at the end of the thorax. Only the ♂ of the first species has a costal fold on the F.

1 (2a). ♂ with a costal fold. Upf with 4 semi-hyaline apical spots: in ♀ often with whitish discal spots. Wings more produced than in rest of the species. Antennal nudum 18 segments, tip very blunt. ♂ F 18 mm.

heteropterus Plötz 1884: ♂ Brazil. Fig Seitz.

Synonym. *parkeri* Weeks 1906: Venezuela. Fig Weeks 1911.

B.M. 2 ♂ Venezuela. 1 ♂ Amazons. 13 ♂ 5 ♀ Minas Geraes. 6 ♂ 1 ♀ São Paulo. 3 ♂ S. Brazil.

2a (1). ♂ without a costal fold.

2b (4). F termen nearly straight. Upf without any apical spots. ♂ F 17 mm.

2 (3). Upf the alternating grey and dark bands on the outer half of the wing narrow and equal. Cuiller of right clasp longer than the valva. Antennal nudum 17 segments.

austerus Schaus 1902: Peru. Fig Hayward 1948, ♂ and genitalia.

B.M. 1 ♂ Peru (Yurimaguas). 5 ♂ Bolivia (Santa Cruz). 1 ♂ Goyaz. 4 ♂ 1 ♀ Minas Geraes. 4 ♂ S. Brazil (São Paulo. Paraná). 11 ♂ 3 ♀ Paraguay. 16 ♂ 3 ♀ Argentine (Santa Fé).

3 (2). Upf the central dark band on the outer half of the wing much wider than the grey bands on either side, continuous, not separated into spots by dark veins. Unf postdiscal macular pale band faint and regular. ♀ paler: unf with faint apical white spots. Antennal nudum 15 segments. Right clasp, cuiller and valva sub-equal.

inga nov: ♂ Bahia: A. Miles Moss: type B.M.

B.M. 1 ♂ 1 ♀ Bahia.

4 (2b). F termen highly convex or centrally angled. Upf usually with 2 hyaline spots. ♂ F 16 mm. Antennal nudum 15 segments.

gesta. 2 sub-species.

(a). Superficially inseparable from *gesta*, except that the cilia H tend to be whitish, but without any white spots unh. Right clasp has a small style projecting inward from the valva.

Sub-sp. **invisus** Butler & Druce 1872. ♂ Costa Rica: type B.M.

Synonyms. *gorgona* Plötz 1884: Guatemala. Fig Seitz. *llano* Dodge 1903: Texas.

B.M. 16 ♂ 15 ♀ Mexico. 7 ♂ 5 ♀ Guatemala. 5 ♂ 1 ♀ Honduras. 2 ♂ Salvador. 1 ♂ Nicaragua. 7 ♂ 5 ♀ Costa Rica.

(b). Right clasp without an inward style. Typical *gesta* has a plain unh with brown cilia. Specimens from Colombia (Cauca and Dagua Valleys), Ecuador (Paramba), Bolivia and S. Brazil have unh white postdiscal and submarginal spots, and white cilia = *bigutta*. Specimens from N. Brazil (Pernambuco to Matto Grosso), Paraguay and Argentine have whitish cilia H = *brusus*. Elsewhere there are frequent intermediates. The variation seems individual rather than sub-specific.

Sub-sp. **gesta** Herrich-Schäffer 1863: Cuba. Fig Seitz: Godman & Salvin, ♂ and genitalia: Lindsey, etc., genitalia: Hayward 1948, ♂ and genitalia.

Synonyms. *bigutta* Prittwitz 1868: ? loc. Fig Seitz. *brusus* Burmeister 1878: ♀ Buenos Ayres: figured. *blanda* Plötz 1884: ? loc.

B.M. 2 ♂ 2 ♀ Panama. 14 ♂ 8 ♀ Colombia. 12 ♂ 2 ♀ Cauca and Dagua Valleys. 13 ♂ 12 ♀ Venezuela. 7 ♂ 7 ♀ Trinidad. 1 ♂ 1 ♀ Tobago. 6 ♂ 7 ♀ Cuba. 7 ♂ 5 ♀ Haiti. 6 ♂ 6 ♀ Jamaica. 2 ♂ 1 ♀ Ecuador (Paramba. Archidona). 10 ♂ 10 ♀ Peru (Chanchamayo. Huanco. La Merced. Rio Colorado. Moyabamba). 14 ♂ 6 ♀ Bolivia (Yungas, La Paz. Mapiri. San José. Coroico. Beni R. Buenavista. Santa Cruz). 8 ♂ 8 Pará. 2 ♂ 2 ♀ Pernambuco. 2 ♂ Bahia. 1 ♂ 2 ♀ Goyaz. 4 ♂ Ceara. 2 ♂ Minas Geraes. 4 ♂ 3 ♀ Matto Grosso. 16 ♂ 15 ♀ Brazil (Rio. São Paulo. Paraná. Petropolis). 8 ♂ 4 ♀ Paraguay. 2 ♂ 1 ♀ Argentine.

F.15. EPHYRIADES Hübner 1819: type *arcas* Drury: fixed by Scudder 1875 as *otreus* Stoll, believed to be a synonym of *philemon*, which is a sub-species of *arcas*.
Synonyms. *Oileides* Hübner 1825: type *zephodes* Hübner: fixed by Scudder 1875.
Brachycoryne Mabille 1883: type *arcas* Drury: sole species included was *flyas* Stoll, believed to be a synonym of *philemon*, which is a sub-species of *arcas*.
Melanthes Mabille 1904: type *brunnea* Herrich-Schäffer: fixed by Lindsey 1925.

A West Indian genus with unusual secondary sexual characters. ♂ in addition to a very long, internally white, costal fold, and a hair tuft on the hind tibiae entering a thoracic pouch, the upf (and in 2 species most of uph) is entirely overlaid with specialised recumbent hairs. Antennae with a stout apiculus: shaft black, minutely, but conspicuously chequered white. Palpi short: black below in ♂ with a few grey hairs: sordid white in ♀. Sexes dimorphic. Genitalia asymmetric.

1a (4). ♀ upf with a hyaline spot in the cell.

1b (3). ♂ above, black, with a strong purple gloss, unmarked. ♀ upf the hyaline spot in space 3 is placed nearer to the spot in space 2 than to the spot in space 4. Antennal apiculus blunt, nudum with 20 segments.

1 (2). ♂ uncus with conspicuous side lobes: aedoeagus twice bent at right angles above the vinculum: right clasp ending in a large, circular, spined process. ♀ upf cell spot and the spot in space 2 with their inner and outer edges in line.

arcas. 2 sub-species.

(a). ♂ unf with a small, but conspicuous white spot before the upper end of the cell, as shown in Drury's figure. Small ♂ F 18, ♀ 20 mm.

Sub-sp. **arcas** Drury 1773: ♂ St Christopher: figured. Synonym. *fusconigrans* Goeze 1790: for Drury's figure. B.M. 7 ♂ 1 ♀ Antigua. 2 ♂ 1 ♀ St Eustatius.

(b). ♂ unf unmarked. Large ♂ F 21, ♀ 22 mm.

Sub-sp. **philemon** Fabricius 1775: ♂ S. America. Synonymised by Latreille 1823 with *arcas*, but no mention is made

of the white spot unf, though the chequered antenna is specified. Fig Seitz as *arcas*. Hübner 1825, ♂ plate 159/1 and 2, as *obscurus*: ♀ plate 151/3. 4 as *zephodes*.
Synonyms. *flyas* Stoll 1780: ♂ "Surinam": figured. The large size agrees with *philemon*.
otreus Stoll 1780: ♀ Surinam: figured. Taken to be the ♀ of *flyas*. Fig Seitz.
clericus Fabricius 1793: ♀ S. America.
astur (Sch. MS) Plötz 1884.
B.M. 2 ♂ St Thomas. 1 ♂ 4 ♀ Jamaica. 1 ♂ 1 ♀ Cuba. 1 ♀ W. Indies. 1 ♀ Honduras. 2 ♂ Brazil. 1 ♂ no loc.

2 (1). Uncus without side lobes: aedoeagus straight, spatulate at end: right clasp ending in a stalked, heart-shaped process. ♂ unf unmarked and only separable from *arcas philemon* by the genitalia and the smaller size, ♂ F 17 mm. ♀ upf the cell spot is inward to the spot in space 2, edges not in line: F 19 mm.

zephodes Hübner 1825: ♀ No loc: fig plate 151/1 and 2, (3 and 4 are *philemon*). Fig Seitz is *brunnea*: genitalia by Williams 1931 as *arcas*.
Synonym. *velasquez* Lucas 1857: ♂ Cuba.
B.M. 20 ♂ 24 ♀ Haiti. 9 ♂ 4 ♀ Cuba. 1 ♂ 1 ♀ Porto Rico. 1 ♂ 1 ♀ Jamaica. 1 ♂ St Thomas. 1 ♂ 1 ♀ St Bartholomew (very small, F 16 mm.). 1 ♀ Trinidad. 1 ♂ Mexico. 1 ♂ 1 ♀ Brazil. 3 ♂ 1 ♀ no loc.

3 (1b). ♂ above brown, without a purple gloss. Upf with small hyaline spots about apex. Uncus with very narrow side lobes: aedoeagus not twisted, nor spatulate: right clasp ending in a pointed narrow process. ♀ upf spots generally smaller: spot in space 3 midway between the spots in spaces 2 and 4. Antennal apiculus sharp, nudum of 24 segments.

brunnea. 4 sub-species.
(a). ♂ large, F 22–24 mm.: Upf with few minute spots and none in cell. ♀ with a spot in space 1b upf.

Sub-sp. **jamaicensis** Möschler 1878: ♂ Jamaica: unpublished fig of type in B.M. Fig Seitz.
B.M. 6 ♂ 4 ♀ Jamaica.
(b). ♂ small, F 16–20 mm. Upf spots generally more

numerous and often with an upper cell spot: but very variable and some specimens are spotless. ♀ may have a spot in space 1b upf.

Sub-sp. **brunnea** Herrich-Schäffer 1864: ♂ Cuba: unpublished fig of type in B.M. Fig Seitz ♂ and ♀ as *zephodes*: Holland ♂ ♀: genitalia fig by Skinner & Williams 1923.

Synonym. *electra* Lintner 1881: ♀ Ontario. Fide Skinner & Williams 1923.

B.M. 31 ♂ 23 ♀ Cuba. 6 ♂ 3 ♀ Bahamas. 1 ♂ Gulf of Mexico (at sea). 1 ♀ Honduras.

(c). Darker and rather smaller than *brunnea*, and upf markings reduced.

Sub-sp. **floridensis** Bell & Comstock 1948: ♂ Florida.

B.M. 1 ♂ Florida.

(d). Upf no white spots: unh with hazy pale bands.

Sub-sp. **dominicensis** Bell & Comstock 1948: ♂ Dominica: genitalia figured.

B.M. None.

4 (1a). ♀ upf hyaline spots small, in spaces 3, 4 and 5 (tiny dots), 6 and 7 (dots) and 8 and 9. Unh dorsal half pale blue, with dark postdiscal spots in spaces 3 and 4. Above, dark bands conspicuous, no purple gloss. ♀ F 18 mm. Nudum 15 segments.

eugramma Mabille 1888: ♀ Chiriqui: figured. Fig Godman & Salvin.

B.M. 1 ♀ Chiriqui.

F.16. ERYNNIS Schrank 1801: type *tages* Linnaeus: fixed by Scudder 1872.

Synonyms. *Thymele* Fabricius 1807: type *tages* Linnaeus: fixed by Westwood 1840.

Astycus Hübner 1823: type *tages* Linnaeus: fixed by Hemming 1933.

Thanaos Boisduval 1834: type *tages* Linnaeus: fixed by Blanchard 1841.

Hallia Tutt 1906: type *marloyi* Boisduval: fixed by author: homonym (Edwards 1850).

A Palaearctic and Nearctic genus. F apex sharply angled, costa and termen straight: vein 12 straight, ending opposite the origin of vein 4. Antennae < ½ costa: bent at beginning of nudum, consisting of 14–21 segments: apiculus longer than rest of club, tip blunt: shaft chequered. Palpi 2nd segment long, porrect, hairy: 3rd short, ♂ with a costal fold upf (absent in 2 Palaearctic species). ♂ in 4 species with a hair tuft on the hind tibia fitting into a pouch on the thorax, absent in Palaearctic species. Facies very similar throughout the genus and often dissection is necessary for identification. The genitalia are asymmetric in the uncus and the clasps. Sit with the wings erect or nearly flat, as in *Pyrgus*: in repose they may be folded back as in many moths.

1a (3a). Upf no hyaline spots at apex or elsewhere.
1 (2). ♂ hind tibiae with a tuft. Upf discal band not parallel to the termen, dorsally inclined inwards. ♂ F 15 mm. Nudum of antennae, 14 segments.

icelus Scudder & Burgess 1870: ♂ New England. Fig Seitz: Holland: genitalia by Lindsey, Bell & Williams.
Synonyms. *bautista* Plötz 1884: California.
hamamaelidis (Fitch MS) Scudder 1889.
B.M. 1 ♂ 1 ♀ Arctic America. 38 ♂ 9 ♀ Canada (Manitoba. Nova Scotia. Selkirk Mts.). 55 ♂ 17 ♀ U.S.A. (Washington Territory. Oregon. Wisconsin. New England. New York. New Jersey. N. Carolina. Washington. New Brunswick. Pennsylvania. Idaho. Colorado. California. Florida. Massachusetts).

2 (1). ♂ hind tibiae without a tuft. Upf discal band parallel to termen. ♂ F 18 mm. Nudum 14 segments.

brizo. 5 sub-species.
(a). Cuiller of left clasp much longer than that of right clasp. Below strongly marked.

Sub-sp. **brizo** Boisduval & Le Conte 1833: ? loc: figured. Fig Holland: ♂ genitalia by Lindsey, etc.
B.M. 1 ♂ 2 ♀ "Canada". 64 ♂ 23 ♀ U.S.A. (Pennsylvania. New Hampshire. New England. New Jersey. New York. Wisconsin. Illinois. Virginia. N. Carolina. Texas. Georgia. Florida. Massachusetts. Great Falls, Potomac).
(b). Similar, but much browner due to the reduction in the white hairs on the wings. Below, markings reduced. Clasps as *brizo*.

Sub-sp. **somnus** Lintner 1881: ♂ Florida. Fig Holland: Seitz.
B.M. 10 ♂ 2 ♀ Florida.

(c). Cuillers of clasps sub-equal, rounded and conspicuously toothed. Above, as *brizo*: below, as *somnus*.

Sub-sp. **callidus** Grinnell 1904: ♂ (nec ♀) California: identity fixed by Dyar 1905. Fig Comstock: genitalia by Lindsey, etc.
Synonym. *lacustra* Wright 1905: ♂ California: figured.
B.M. 8 ♂ California.

(d). Cuillers of clasps sub-equal, longer than in *callidus*, but not so long as the left clasp of *brizo*. Generally with grey frosting upf, but browner in Colorado.

Sub-sp. **burgessi** Skinner 1914: ♂ Arizona. Fig of genitalia by Lindsey, etc.
B.M. 15 ♂ 1 ♀ Colorado. 3 ♂ 3 ♀ New Mexico. 14 ♂ 5 ♀ Arizona.

(e). As *brizo*, but cilia white. Genitalia not seen.

Sub-sp. **müllerі** Draudt 1923: ♂ Mexico: figured.
Synonym. *mercurius* Dyar 1926: ♂ Mexico.
B.M. None.

3a (1a). Upf with more or less developed hyaline spots at the apex and sometimes small discal and cell spots.
3b (6a). ♂ hind tibiae with a tuft.
3c (5). Small, ♂ F 13 to 17 mm. Left clasp has the two branches of the cuiller parallel, followed by a long, broad style. Nudum of 14 segments.
3 (4). Cuiller of left clasp with the lower branch wider than the upper branch and is furnished with a central flap on the inside. Upf generally greyer and more uniform, without an ochreous area about end of cell.

persius. 2 sub-species.

(a). Very dark in ♂, due to absence of grey hairs upf: markings vestigial.

Sub-sp. **borealis** Carey 1906: Mackenzie River.
Synonym. *avinoffi* Holland 1930: ♂ Yukon. Fig Holland 1931.
B.M. 1 ♀ Alaska. 1 ♀ Yukon. 6 ♂ 5 ♀ Klondyke.

(b). ♂ upf more or less conspicuously frosted with grey hairs. Variation in size and appearance is considerable.

Sub-sp. **persius** Scudder 1863: ♂ New England. Fig Scudder & Burgess 1870 with genitalia also by Scudder 1889: Seitz: Holland: genitalia by Lindsey, etc.
Synonyms. *cervantes* Boisduval 1852: N. America: homonym (Graslin 1836).
rutilius (Scudder MS) Lintner 1878.
? *fredericki* Freeman 1943: ♂ S. Dakota.
B.M. 6 ♂ 1 ♀ Alberta. 16 ♂ 5 ♀ Br Columbia. 2 ♂ 1 ♀ Washington Territory. 1 ♂ 1 ♀ Wyoming. 2 ♂ 4 ♀ Oregon. 11 ♂ 5 ♀ California. 40 ♂ 18 ♀ Colorado. 1 ♂ Utah. 1 ♂ 1 ♀ New Mexico. 1 ♂ 1 ♀ Massachusetts. 2 ♂ 1 ♀ New York.

4 (3). Cuiller of left clasp with the lower branch no wider than the upper branch and without a flap.
lucilius. 3 sub-species.
(a). Food plant Aquilegia. Generally smaller ♂ F 15 mm. Upf with an ochreous area about end of cell.
Sub-sp. **lucilius** Scudder & Burgess 1870: ♂ New England. Figured Lintner 1873: Scudder 1889: Seitz: Holland: genitalia by Forbes 1936.
B.M. 4 ♂ 3 ♀ Canada (Toronto. Quebec). 16 ♂ 8 ♀ New York. 1 ♂ Massachusetts. 1 ♂ New Hampshire. 1 ♂ New Jersey.
(b). Food plant Baptisia (Leguminosae). Generally larger ♂ F 17 mm. Upf as *lucilius*.
Sub-sp. **baptisiae** Forbes 1936: ♂ Massachusetts: genitalia figured.
B.M. 2 ♂ 1 ♀ New York. 3 ♂ New Jersey. 18 ♂ 1 ♀ N. Carolina. 1 ♂ 2 ♀ Pennsylvania. 1 ♂ Montana. 1 ♂ Oklahoma. 3 ♂ 2 ♀ Texas. 14 ♂ 2 ♀ Florida. 1 ♂ Philadelphia. 1 ♂ Iowa. 1 ♂ 1 ♀ Illinois. 1 ♂ 1 ♀ Utah.
(c). Food plant Aquilegia. ♂ F 15–16 mm. H cilia whiter. Upf frosted with grey hairs.
Sub-sp. **afranius** Lintner 1878: ♂ Colorado. Fig Comstock: Holland: Seitz: genitalia and ♂ by Godman & Salvin.
Synonym. ? *quadratus* Dyar 1926: Mexico.
B.M. 11 ♂ 8 ♀ Colorado. 7 ♂ Arizona. 4 ♂ 2 ♀ California. 2 ♂ 2 ♀ New Mexico. 1 ♂ Mexico (N. Sonora).

5 (3c). Large, ♂ F 21 mm. Left clasp has the lower branch of the cuiller at right angles to the upper branch and the style is undeveloped. Nudum 16 segments.

zarucco. 2 sub-species.

(a). Cilia H dusky.

Sub-sp. **zarucco** Lucas 1857: Cuba. Fig Seitz: genitalia by Lindsey, etc.

Synonyms. *terentius* Scudder & Burgess 1870: ♂ Florida.
ovidius Scudder & Burgess 1870: ♂ Florida.
naevius Lintner 1881: ♂ Florida. Fig Seitz: Holland.
diogenes Plötz 1884: Cuba. Fig Seitz.
B.M. 16 ♂ 5 ♀ Cuba. 1 ♂ Haiti. 15 ♂ 16 ♀ Florida. 6 ♂ 6 ♀ Georgia. 2 ♂ 2 ♀ Alabama. 1 ♂ S. Carolina. 1 ♂ Texas.

(b). Cilia H white. Upf ochreous area end cell conspicuous, as it is in *zarucco*.

Sub-sp. **funeralis** Scudder & Burgess 1870: ♂ Texas. Fig Seitz: Holland: Comstock: Wright: Godman & Salvin, ♂ and genitalia, also by Hayward 1948: genitalia by Lindsey, etc.

Synonyms. *clericalis* Burmeister 1875: ♂ Buenos Ayres. Fig Burmeister 1878.
australis Mabille 1883: ♂ Colombia: type B.M.
B.M. 23 ♂ 19 ♀ California. 21 ♂ 7 ♀ Arizona. 1 ♂ Nebraska. 5 ♂ 5 ♀ Texas. 15 ♂ 7 ♀ Mexico. 3 ♂ 1 ♀ Clarion Is. 6 ♂ Guatemala. 1 ♂ Salvador. 4 ♂ Costa Rica. 13 ♂ 3 ♀ Colombia. 3 ♂ 1 ♀ Venezuela. 6 ♂ 3 ♀ Ecuador (Baños. Ambato). 4 ♂ Peru (Huanaco. Amazonas). 5 ♂ 1 ♀ Bolivia (Corumba. Tanampaya). 2 ♂ Minas Geraes. 5 ♂ 1 ♀ Paraguay. 22 ♂ 17 ♀ Argentine.

6a (3b). ♂ hind tibiae without a tuft.

6b (9a). Antennal nudum short, 14–17 segments.

6 (7a). Uph with well-marked spots, including the spot end cell. Upf much more variegated than any other species. Cilia H brown. ♂ F 15 mm. Left clasp with the cuiller undivided, broad and turned inwards: valva with a short broad style.

martialis Scudder 1869: ♂ Iowa. Fig Holland: genitalia by Lindsey, etc.

Synonyms. *ausonius* Lintner 1872: ♂ New York: figured. Fig Scudder 1889, ♂ and genitalia.

quercus (Boisduval MS) Butler 1870.
B.M. 7 ♂ 2 ♀ Canada. 70 ♂ 26 ♀ U.S.A. (Ohio. New York. Montana. Colorado. Georgia. N. Carolina. Pennsylvania. Iowa. California).

7a (6). Uph markings absent or faint. Cuiller left clasp bifid.
7 (8). Left clasp, lower branch of cuiller very long, curved, narrow and pointed: style sharp pointed. ♂ F 16 mm.

pacuvius. 2 sub-species.
(a). Cilia H dark.

Sub-sp. **lilius** Dyar 1904: Br Columbia. Genitalia fig by Lindsey, etc., as *callidus* and by Grinnell 1904, Comstock 1927.
Synonym. *pernigra* Grinnell 1905. ♂ California. Dos Passos *in litt* states that the type is a bodyless ♂ without the thoracic pouch of *persius*.
B.M. 9 ♂ 4 ♀ Br Columbia. 3 ♂ 1 ♀ Oregon. 10 ♂ 7 ♀ California.
(b). Cilia H white.

Sub-sp. **pacuvius** Lintner 1878: ♂ New Mexico. Fig Seitz: Holland: Godman & Salvin figs are of *scudderi*: genitalia by Lindsey, etc.
B.M. 4 ♂ 2 ♀ California. 45 ♂ 6 ♀ Arizona. 18 ♂ 5 ♀ Colorado. 2 ♂ New Mexico. 1 ♂ Mexico (Orizaba).

8 (7). Left clasp, lower branch of cuiller broad-ended, at right angles, and of equal length to the upper branch: no style. Cilia H white. ♂ F 17 mm.

scudderi Skinner 1914: ♂ Arizona. ♂ and genitalia fig by Godman & Salvin as *pacuvius*: genitalia fig by Lindsey, etc.
B.M. 10 ♂ Arizona. 12 ♂ Mexico (N. Sonora. Guerrero).

9a (6b). Antennal nudum long, 18–21 segments.
9 (10, 11). Uncus, seen ventrally, with a large external process on the left side and a very small process on the right side. Cuiller of clasp bifid: valva broadly rounded, no style. H cilia white. ♂ F 20 mm.

tristis. 2 sub-species.
(a). Unh plain brown, no submarginal white markings.

Sub-sp. **tristis** Boisduval 1852: ♂ California: type B.M., figured by Oberthür 1913. Fig Staudinger 1888: genitalia by Godman & Salvin and by Lindsey, etc.
B.M. 36 ♂ 7 ♀ California.
(b). Unh with a more or less well-developed macular submarginal white border, which occasionally (*albomarginatus*) appears uph.

Sub-sp. **tatius** Edwards 1882: ♂ ? loc: type figured by Holland 1931.
Synonym. *albomarginatus* Godman & Salvin 1899: ♂ Guatemala: ♂, ♀ and ♂ genitalia figured: type B.M.
B.M. 16 ♂ 5 ♀ Arizona. 1 ♂ Colorado. 17 ♂ 1 ♀ Mexico. 3 ♂ 2 ♀ Guatemala. 2 ♂ Honduras. 8 ♂ 1 ♀ Costa Rica. 2 ♂ 2 ♀ Panama. 7 ♂ Colombia.

10 (9, 11). Uncus, seen ventrally, with a narrow, spined, projecting process on either side. Left clasp, valva with a pointed style at right angles to the branches of the cuiller. H cilia brown. ♂ F 20 mm. A brown species.

horatius Scudder & Burgess 1870: ♂ New England. Fig Holland: Seitz: genitalia by Lindsey, etc.
Synonyms. *virgilius* Scudder & Burgess 1870: ♂ New England.
petronius Lintner 1881: ♂ Florida. Fig Holland: Seitz.
B.M. 4 ♂ 3 ♀ "Canada". 1 ♂ Ohio. 1 ♂ Massachusetts. 2 ♂ 1 ♀ Washington. 1 ♂ Montana. 1 ♂ Pennsylvania. 1 ♂ Iowa. 1 ♂ 2 ♀ N. Carolina. 2 ♂ 1 ♀ Georgia. 1 ♂ 1 ♀ California. 9 ♂ 5 ♀ Texas. 23 ♂ 21 ♀ Florida. 4 ♂ New Jersey. 12 ♂ 2 ♀ New Mexico. 1 ♂ 1 ♀ Arizona. 8 ♂ 6 ♀ Colorado.

11 (9, 10). Uncus, seen ventrally, without side processes. Left clasp, style parallel to the branches of the cuiller and of much the same size and shape as the lower branch. ♂ F 18–21 mm.

juvenalis. 5 sub-species.
(a). Style of right clasp broad-ended. Upf frosted. Unh usually with conspicuous white spots in spaces 6 and 7. Cilia H dark.

Sub-sp. **propertius** Scudder & Burgess 1870: ♂ California: figured. Fig Holland: Comstock: genitalia by Lindsey, etc.

Synonym. *tibullus* Scudder & Burgess 1870: ♂ California: figured.

B.M. 13 ♂ 9 ♀ Br Columbia. 6 ♂ 4 ♀ Oregon. 23 ♂ 17 ♀ California.

(b). Similar, but lower branch of left clasp short, broad and rounded. Upf brown like *horatius*.

Sub-sp. **meridianus** Bell 1927: ♂ Arizona. Genitalia fig by Lindsey, etc., 1931.

B.M. 3 ♂ California (Santa Cruz). 3 ♂ 3 ♀ Arizona. 2 ♂ Ohio. 1 ♂ 1 ♀ Texas.

(c). Style of right clasp, long, slender, curved and sharply pointed: style of left clasp also slender. Upf grey like *propertius*. Cilia H brown.

Sub-sp. **plautus** Scudder & Burgess 1870: ♂ Florida: genitalia figured.

B.M. 14 ♂ 7 ♀ New Mexico. 22 ♂ 6 ♀ Colorado. 2 ♂ 2 ♀ Florida. 4 ♂ Washington Territory.

(d). Style of right clasp short, broad, curved and sharply pointed: style of left clasp also broader and shorter than in *plautus*. Upf generally brown. Cilia H brown.

Sub-sp. **juvenalis** Fabricius 1793: America: fig in Jones Icones. Genitalia fig by Lindsey, etc.

Synonyms. *costalis* Westwood 1852: ♂ ? loc: figured: type B.M.

ennius Scudder & Burgess 1870: ♂ New England.

juvenis Hübner 1820.

B.M. 4 ♂ Canada (Winnipeg). 5 ♂ Wisconsin. 2 ♂ 1 ♀ Montana. 1 ♀ Ohio. 3 ♂ Alleghanies. 28 ♂ 9 ♀ East U.S.A. 1 ♀ N. Carolina. 2 ♂ Rocky Mts. 2 ♂ Kansas. 1 ♂ 1 ♀ Utah. 9 ♂ 4 ♀ Texas. 3 ♂ Georgia.

(e). Genitalia as *juvenalis*. Upf black. Cilia H white.

Sub-sp. **clitus** Edwards 1882: ♂ no loc. Fig Seitz: Holland: genitalia by Lindsey, etc.

Synonym. *maestus* Godman & Salvin 1899: ♂ Mexico: type B.M.: figured and genitalia.

B.M. 13 ♂ 1 ♀ Arizona. 7 ♂ 2 ♀ Mexico (N. Sonora. Puebla. Jalisco).

G. PYRGUS GROUP

Antennae short, shorter than half costa: shaft chequered: club flattened, blunt, bent at beginning of club: nudum 10–15. Palpi porrect. Legs normal. Abdomen long, at least as long as dorsum. F cell short. H vein 5 well marked and generally midway between veins 4 and 6. ♂ generally with a costal fold and with a tuft on the hind tibiae fitting into a thoracic pouch.

The genus *Pholisora* has been generally united with *Staphylus*, but structurally the two genera appear to be widely different. The question was discussed with Professor W. T. M. Forbes of Cornell University during his last visit to England: he agreed to the view here expressed.

KEY TO GENERA

1a (3a). Wings produced: F costa > dorsum: H costa = dorsum. Palpi short, hairy: third segment inconspicuous.
1 (2). Conspicuously spotted species.
Pyrgus. 12 species. Canada–Argentine. W. Indies. There are 19 Palaearctic species.

2 (1). White or white banded species.
Heliopetes. 12 species. U.S.A.–Argentine.

3a (1a). Wings not produced: costa F nearly = dorsum: H costa > dorsum. Palpi long: third segment pendulous.
3 (4). Termen crenulate.
Celotes. 1 species. U.S.A.–Mexico.

4 (3). Termen even.
Pholisora. 4 species. U.S.A.–Mexico.

KEY TO SPECIES

G.1. PYRGUS Hübner 1819: type *malvae* Linnaeus: fixed by Westwood 1841 as *alveolus* Hübner, a synonym of *malvae*. Synonyms. *Syrichtus* Boisduval 1834: type *oileus* Linnaeus:

by tautonomy the type is *syrichtus* Fabricius, which is a synonym of *oileus*.

Scelotrix Rambur 1857: to replace *Syrichtus* objected to, incorrectly, on the score of tautonomy.

Bremeria Tutt 1906: type *bieti* Oberthür: fixed by Lindsey 1921: homonym (Alphéraky 1892).

Teleomorpha, *Hemiteleomorpha*, *Ateleomorpha* Warren 1926: types fixed by Hemming 1934 as *carthami* Hübner (recte *fritillarius* Poda), *malvae* Linnaeus and *onopordi* Rambur.

A compact genus characterised by the facies and the stout blunt antennal club, bent at its commencement: nudum 10–15 segments. ♂ generally with a costal fold and in all but one species (*communis*) with a hair tuft on the hind tibiae entering a pouch at the end of the thorax. Palpi hairy.

I (2a). Upf no white spot at the base of space 2. ♂ with costal fold.

centaureae. 3 American and 2 Palaearctic sub-species with slight differences in the clasps.

(a). American forms differ from Palaearctic forms in having the end of the cell defined by a white bar on upf. Labrador specimens resemble the Scandinavian form in having a very white unh: the dark dots along the outer edge of the white cilia are not conjoined to the greenish-brown wing: veins below, white. ♂ F 13 mm.

Sub-sp. **freija** Warren 1924: ♂ Labrador. Fig Warren 1926, ♂ and genitalia.

Synonym. *reducta* Warren 1926: Labrador.

B.M. 17 ♂ 5 ♀ Labrador.

(b). Unh ground colour yellower and the white areas reduced: cilia usually chequered right through. Large, ♂ F 15 mm. and spots above, larger.

Sub-sp. **loki** nov: ♂ Long Peak Trail, Colorado: above timber line: T. D. A. Cockerell: type B.M.

B.M. 4 ♂ 2 ♀ Canadian Rockies. 22 ♂ 8 ♀ Colorado (South Park. Glen Cove. Bullina. Hall Valley).

(a). Similar to *loki*, smaller, ♂ F 13 mm. and darker. Unh markings reduced, postdiscal white spots minute.

Sub-sp. **wyandot** Edwards 1863: ♂ Long Island: figured.

Fig as *centaureae* by Holland and genitalia by Lindsey, etc., 1931.
B.M. 1 ♂ New York. 8 ♂ 5 ♀ New Jersey. 1 ♂ 1 ♀ N. Carolina. 1 ♂ 1 ♀ Virginia.

2a (1). Upf with a white spot at base of space 2.
2b (12). Upf hyaline apical spots in spaces 6, 7, 8 not produced into space 9.
2c (9a). Upf no hyaline spot in space 10 between the apical spots and the cell spot. ♂ with hair tuft on hind tibiae. Wings without submarginal white spots.
2d (8). Upf no hyaline dot at base of space 8 between the apical spots and the cell spot.
2e (5a). H apex more or less produced and termen slightly concave at space 1c. ♂ without a costal fold.
2 (3a). Wings narrow: apex H produced conspicuously so that vein 8 H is as long as vein 1 F. Cilia broadly white, unchequered or only faintly so. Bears a strong resemblance to Chinese species of the genus *Carterocephalus*, such as *christophi*. ♂ F 10 mm.
limbata. 2 sub-species.
(a). Uph ♂ with no cell spot: ♀ with a cell spot detached from the central white band. Unh nearly white with narrow black central and discal angled bands.
Sub-sp. **limbata** Erschoff 1877: ♀ Peru: figured.
Synonym. *biseriatus* Weymer 1890: ♂ High Bolivia: figured.
B.M. 1 ♂ Bolivia (Chaquemata, 15,000 ft.). 1 ♀ High Bolivia (Sorato).
(b). ♂ ♀ uph cell spot linked to the discal band along the upper half of the cell. Unh black markings broken up.
Sub-sp. **nigella** Weeks 1902: ♂ Bolivia (Sicasica). Fig Weeks 1905.
B.M. 2 ♂ 2 ♀ Peru, Puno, 13,000 ft. (Lake Titicaca).

3a (2). H vein 8 shorter than vein 1 F. Wings broad.
3 (4). Uph postdiscal white spots conspicuous, ending in a spot in space 7 over the large quadrate spot at end of cell. Cilia brownish, plain or faintly chequered. Unh cinnamon with narrow dark bands, which in ♀ tend to be broken up or obsolete. ♂ F 11–13 mm.

fides Evans 1942: ♂ Quillen, Chili–Argentine border: type B.M.
Figured Hayward 1948, ♂ and genitalia.
Synonym. *haywardi* Ureta 1947: ♂ Chili (Vicuña).
B.M. 1 ♂ Peru (Callao). 16 ♂ 9 ♀ Chili (Valparaiso. Quillen. Coquimbo). 2 ♂ Argentine (Cordoba). 1 ♂ Patagonia.

4 (3). Uph postdiscal spots faint or absent, never reaching space 7.

bocchoris. 3 sub-species with similar genitalia.

(a). Uph with a large quadrate white spot at end of cell. Unh white with narrow black markings more or less broken up into small dashes and tiny dots. ♂ F 13–14 mm. Cilia white, conspicuously chequered.

Sub-sp. **bocchoris** Hewitson 1874: ♀ Bolivia: type B.M. Fig. Hayward 1948, ♂ and genitalia.
Synonym. *emma* Staudinger 1894: ♀ Cocopata: figured. Fig Seitz.
B.M. 1 ♂ 1 ♀ Peru (Puno). 6 ♂ 2 ♀ Bolivia (Illimani). 4 ♂ 3 ♀ Argentine (La Rioja).

(b). Similar, but smaller, ♂ F 11–12 mm. Uph more or less unmarked.

Sub-sp. **cuzcona** Draudt 1920: ♂ Cuzco: figured in Seitz.
Synonym. *seminigra* Hayward 1933: ♂ Argentine: figured.
B.M. 19 ♂ 9 ♀ Peru (Tirapata, Carabaya. Lake Titicaca. Libertad).

(c). Uph with a narrow white bar at end of cell and the area beyond, up to the postdiscal spots, is paler brown than the ground colour. Cilia brownish, inconspicuously chequered. Unh cinnamon, with continuous, but irregularly coloured, brown to black central and discal bands. ♂ F 13–15 mm. Superficially rather like *fides*.

Sub-sp. **trisignatus** Mabille 1875: ♀ Valparaiso: type B.M. Fig Seitz.
Synonym. *archia* Dyar 1913: Peru.
B.M. 16 ♂ 18 ♀ Peru (Trujillo. Arequipa. Callao. Lima. Angamarca). 2 ♂ 2 ♀ Chili (Valparaiso).

5a (2e). H termen evenly convex, not produced apically.
5 (6a). Upf or unf no white bar at end of cell. Unh with

broad ochreous-brown central and discal bands. ♂ with costal fold. ♂ F 13 mm.

notatus. 2 sub-species.

(a). Upf markings clear white and fully developed. Uph central white band faint in ♂, conspicuous in ♀.

Sub-sp. **notatus** Blanchard 1852: ♂ Chili.

Synonym. *fulvovittatus* Butler 1881: ♀ Chili: type B.M.

B.M. 5 ♂ 1 ♀ Chili (Central).

(b). Darker. Upf markings reduced and sullied. Uph no central markings. Unh dark bands greenish.

Sub-sp. **valdiviana** Reed 1877: ♂ Valdivia, Chili: type B.M. Fig Seitz.

Synonym. *lossbergi* Oberthür 1912: ♂ Valdivia: type B.M.: figured.

B.M. 4 ♂ Chili (Valdivia).

6a (5). Upf with a white bar at end of cell: always present unf, if obsolete on upf.

6 (7). Cilia F and H white, not, or only faintly, chequered. Upf white spots conspicuous. Unh pale yellowish-brown, markings faint. ♂ F 11 mm.: no costal fold.

scriptura Boisduval 1852: ♂ California: type B.M. Fig Oberthür 1912: Seitz: Holland: genitalia by Lindsey, Bell & Williams 1931.

B.M. 10 ♂ 5 ♀ Colorado. 28 ♂ 2 ♀ Arizona. 1 ♂ California. 1 ♂ Mexico (El Paso).

7 (6). Cilia F and H conspicuously chequered.

ruralis. 3 sub-species.

(a). ♂ with costal fold: F 13 mm. Unh postdiscal band zigzag: spots in spaces 1c and 2, mid cell and mid space 7, small and separated. End of cuiller narrow.

Sub-sp. **ruralis** Boisduval 1852: ♀ California: type B.M. Fig Oberthür 1912: Holland: genitalia by Lindsey, etc.

Synonyms. *caespitalis* Boisduval 1852: ♂ California: type B.M. Fig Seitz.

ricara Edwards 1865: ♂ Empire City, Colorado.

petreius Edwards 1870: ♂ Nevada.

B.M. 24 ♂ 12 ♀ Canada (Vancouver). 24 ♂ 12 ♀ California. 5 ♂ 2 ♀ Oregon. 1 ♂ Idaho. 17 ♂ 2 ♀ Colorado.

(b). ♂ without costal fold: F 11 mm. Unh postdiscal band not zigzag: spots in spaces 1c and 2, mid cell and mid space 7 contiguous. End of cuiller broad.

Sub-sp. **xanthus** Edwards 1873: ♂ Colorado. Fig Barnes & MacDunnough 1916: Holland: genitalia by Lindsey, etc.
Synonym. *xanthus* Plötz 1884: Colorado. Fig Seitz.
B.M. 1 ♂ 1 ♀ Colorado. 6 ♂ 1 ♀ New Mexico.
(c). Differs from *xanthus* only in being blacker unf and unh marking smaller and more sharply defined, the spots mentioned above are well separated.

Sub-sp. **macdunnoughi** Oberthür 1913: ♂ Arizona: type B.M. figured. Fig Barnes & Macdunnough 1916.
B.M. Only the type.

8 (2d). F with a hyaline dot at base of space 8 midway between the cell spot and the apical spots. Above, with numerous small white spots including a dash near base of cell and 2 white dashes in spaces 4 and 5 just beyond end of cell. ♂ F with costal fold; F 11 mm.

crisia Herrich-Schäffer 1864: ♂ Cuba. Fig Seitz: Williams 1931.
Synonym. *odilia* Oberthür 1912: ♀ Haiti: figured: type B.M.
B.M. 12 ♂ 3 ♀ Cuba. 5 ♂ 3 ♀ Haiti.

9a (2c). F with a hyaline dot in space 9 on the costa midway between the cell spot and the apical spots.
9 (10a). Unf no trace of pale streaks beyond the cell spot and the discal spots in spaces 4 and 5. Upf all spots very small, postdiscal spots absent, but submarginal spots are present. Unh greenish-brown, with sullied whitish central and discal bands. ♂ F 12½ mm.: no costal fold: with tibial hair tuft.

veturius Plötz 1884: ? loc. Fig Seitz.
Synonym. *bahiensis* Oberthür 1912: ♂ Bahia: figured: type B.M.
B.M. 2 ♂ Bolivia (Santa Cruz. San José). 1 ♂ 1 ♀ Maranham. 12 ♂ 8 ♀ Pernambuco. 14 ♂ 4 ♀ Bahia. 1 ♂ 1 ♀ Ceara.

10a (9). Unf with more or less conspicuous pale streaks in spaces 4 and 5 just after the end of the cell.

10 (11). ♂ hind tibiae without a hair tuft. Above submarginal white spots absent or incomplete; below, with a black dot or dash on the edge of the termen in the middle of each interspace. Reverdin 1921 reviewed this interesting species at length as well as the next species.

communis. 6 sub-species.

(a). ♂ with costal fold: tip of cuiller bident. There appear to be 2 more or less intergrading forms: dark (*communis*), markings narrow, postdiscal and submarginal spots reduced or absent: pale (*varus*) markings broader than the dark areas. ♂ F 14 mm.

Sub-sp. **communis** Grote 1872: ♂ Alabama. Fig Holland: genitalia by Lindsey, etc.

Synonyms. *tesselata* Scudder 1872: Pennsylvania: homonym (Hewitson 1866).

albovittata (Grote MS) Grote 1872.

insolatrix Plötz 1884: Mexico.

varus Plötz 1884: ♂ Mexico. Copy of unpublished fig in B.M.

skinneri Gunder 1927: ♀ California: figured. Fig Comstock 1927. A melanic aberration.

B.M. 22 ♂ 14 ♀ Canada. 8 ♂ 2 ♀ Oregon. 1 ♂ Nebraska. 3 ♂ 1 ♀ Utah. 2 ♂ 2 ♀ Alabama. 1 ♂ Idaho. 1 ♂ Georgia. 4 ♂ 4 ♀ Pennsylvania. 2 ♂ Wisconsin. 1 ♂ 1 ♀ Louisiana. 1 ♂ 1 ♀ Illinois. 2 ♂ 2 ♀ New York. 1 ♂ 1 ♀ New Jersey. 3 ♂ 2 ♀ Larima Co. 1 ♀ Wyoming. 2 ♀ W. Virginia. 1 ♂ 2 ♀ Missouri. 4 ♂ 3 ♀ Florida. 26 ♂ 14 ♀ California. 10 ♂ 3 ♀ Montana. 11 ♂ 7 ♀ Iowa. 12 ♂ 12 ♀ Texas. 6 ♂ 5 ♀ New Mexico. 25 ♂ 13 ♀ Colorado. 13 ♂ 2 ♀ Mexico (Jalapa. Durango. Orizaba. Puebla. Chilpancingo. Aguas Callientas).

(b). ♂ with costal fold: tip of cuiller monodent, broad. Indistinguishable from *communis* superficially.

Sub-sp. **albescens** Plötz 1884; ♂ Mexico. Fig Seitz and Godman & Salvin as *montivagus*: genitalia by Lindsey, etc.

Synonym. *occidentalis* Skinner 1906; Arizona. Fig Holland.

B.M. 22 ♂ 25 ♀ Arizona. 39 ♂ 31 ♀ S. California. 1 ♂ Colorado. 4 ♂ 2 ♀ Texas (Brownsville). 30 ♂ 17 ♀ Mexico (Colima. Cordova. Morelia. Pinas Altas. Mazatlan. Misantla. Lake Chapale. Jalisco. Orizaba. Durango).

(c). ♂ no costal fold: tip of cuiller monodent, narrow. Like the dark form of *communis*. ♂ F 14 mm.

Sub-sp. **adepta** Plötz 1884: ♀ Colombia. Unpublished fig in B.M.

Fig Seitz as *notata*, also by Godman & Salvin.

Synonyms. *dion* Plötz 1884: ♀ C. America.

lycurgus Plötz 1884: ♂ C. America.

scabellata Reverdin 1921: ♂ ? loc.

B.M. 20 ♂ 12 ♀ Mexico (Orizaba. Guerrero. Vera Cruz. Cordova. Yucatan. El Paso). 21 ♂ 5 ♀ Guatemala. 10 ♂ 8 ♀ Honduras. 1 ♂ Salvador. 6 ♂ 4 ♀ Nicaragua. 20 ♂ 6 ♀ Costa Rica. 22 ♂ 4 ♀ Panama. 40 ♂ 10 ♀ Colombia.

(d). Similar, but generally smaller. ♂ F 12½ mm. and darker, due to reduction of markings: upf the white streaks beyond the cell may be absent, but always traceable unf.

Sub-sp. **orcynoides** Giacomelli 1928: ♂ Argentine; figured: an aberration. Fig Hayward 1948, ♂ and genitalia. Generally referred to as *notatus* Blanchard, which is a different species (No. 5 above).

Synonym. *enigmatica* Giacomelli 1928: Cordoba: figured. Fig of both these aberrations by Hayward 1948.

B.M. 29 ♂ 4 ♀ Venezuela. 10 ♂ 3 ♀ Ecuador (Paramba). 11 ♂ 1 ♀ Bolivia. 1 ♂ 1 ♀ Pará. 6 ♂ 1 ♀ Porto Real. 5 ♂ Matto Grosso. 22 ♂ 15 ♀ S. Brazil (Rio. São Paulo. Paraná. Espirito Santo. Santa Catharina. Rio Grande do Sul). 8 ♂ 12 ♀ Paraguay. 2 ♂ 1 ♀ Uruguay. 31 ♂ 31 ♀ Argentine.

(e). ♂ with costal fold: tip of cuiller rounded, no tooth. Unh bands dark, greenish, compact, regular and continuous: discal band not broken into 3 spots as usual. ♂ F 13 mm.

Sub-sp. **chloe** Evans 1942: ♂ Callao, Peru: type B.M.

B.M. 1 ♂ Ecuador (Loja). 17 ♂ 9 ♀ Peru (Callao. Lima. Choica. Yuroc Marec. San Marca. Trujillo, Amazonas, Chachapoyas).

(f). Similar to *chloe*, but unh the bands are defined by dark lines, between which they are not darker than the ground colour. ♂ F 12½ mm.

Sub-sp. **titicaca** Reverdin 1921: ♂ Peru, Lake Titicaca: figured.

B.M. 2 ♂ Peru (Tarma).

11 (10). ♂ hind tibiae with the usual hair tuft entering into a thoracic pouch. Uph postdiscal and submarginal spots complete: unh no black dots or dashes at edge of termen, and bands indicated by dark dashes instead of being solid. ♂ F 14–17 mm.: with a costal fold.

oileus. 4 sub-species with different forms of clasps.

(a). Unh with a brown spot mid space 8 on costa. A not infrequent variety (*montivagus*) has the unh brownish-ochreous instead of white.

Sub-sp. **oileus** Linnaeus 1767: type in Linnean Society, London, marked "Algeria", a ♀ which probably came from Mexico or the U.S.A.

Synonyms. *syrichtus* Fabricius 1775: America. Fig Seitz (= *orcus*): Holland: genitalia by Godman & Salvin and Lindsey, etc.

montivagus Reakirt 1866: ♂ Colorado. Fig Holland.

adjutrix Plötz 1884: ♂ Mexico.

fumosa Reverdin 1919: ♂ Mexico: figured. Put by Reverdin 1921 (misspelt *fumata*) as = *montivagus*.

B.M. 22 ♂ 10 ♀ Texas. 57 ♂ 31 ♀ Mexico. 26 ♂ 5 ♀ Guatemala. 12 ♂ 8 ♀ Honduras. 1 ♂ Salvador. 8 ♂ 8 ♀ Nicaragua. 20 ♂ 8 ♀ Costa Rica. 1 ♂ Grenada. 1 ♀ Nevis. 3 ♂ 2 ♀ Montserrat. 3 ♂ Antigua. 5 ♂ 2 ♀ St Kitts. 7 ♂ 2 ♀ St Thomas. 13 ♂ 13 ♀ Jamaica. 13 ♂ 13 ♀ Cuba. 13 ♂ 14 ♀ Haiti.

(b). Unh without the brown spot mid costa. Otherwise like *oileus*.

Sub-sp. **orcus** Stoll 1780: ♂ Surinam: figured. Fig Seitz (as *syrichtus*): Hayward 1948, ♂ and genitalia.

Synonyms. *tartarus* Hübner: ♀ Surinam: figured.

cenchreus Hewitson 1878: ♂ Pará: type B.M. A melanic aberration.

syrichtides Reverdin 1919: ♂ Colombia: figured.

B.M. 1 ♀ Costa Rica. 16 ♂ 16 ♀ Panama. 34 ♂ 20 ♀ Colombia. 31 ♂ 27 ♀ Venezuela. 13 ♂ 13 ♀ Trinidad. 14 ♂ 4 ♀ Tobago. 1 ♂ Martinique. 5 ♂ 5 ♀ Grenada. 2 ♂ Grenadines. 6 ♂ 6 ♀ Dominica. 5 ♂ 5 ♀ St Vincent. 9 ♂ 9 ♀ St Lucia. 17 ♂ 15 ♀ Br Guiana. 4 ♂ 1 ♀ Surinam. 18 ♂ 8 ♀ Fr Guiana. 23 ♂ 11 ♀ Peru (Chanchamayo. Chaquimayo. Cuzco. Ucayali. Amazonas). 13 ♂ 9 ♀

Bolivia (La Paz. Santa Cruz. Cochabamba). 9 ♀ 5 ♂ Upper Amazons. 8 ♂ 7 ♀ Pará. 12 ♂ 4 ♀ Bahia. 2 ♂ 5 ♀ Pernambuco. 3 ♀ Maranham. 1 ♂ 1 ♀ Maceo. 10 ♂ 10 ♀ Goyaz. 7 ♂ 6 ♀ Minas Geraes. 8 ♂ 2 ♀ Matto Grosso. 23 ♂ 23 ♀ S. Brazil. 12 ♂ 13 ♀ Paraguay. 13 ♂ 13 ♀ Argentine. 1 ♂ Central Chili.

(c). Unh marking pale and faint on the white ground. Uph spot beyond end cell does not enter the cell.

Sub-sp. **philetas** Edwards 1881: ♀ Texas. Fig Holland, of type: Seitz as *tessellata*.

B.M. 2 ♂ 1 ♀ Texas. 19 ♂ 3 ♀ Arizona. 6 ♂ Mexico (Guerrero. Valladolid. Yucatan. Pinos Altos. Chihuchua).

(d). Above, darker than *orcus*; below similar to *orcus*. ♂ uph spot at upper end of cell is separated by a dark line from the cell, instead of being conjoined as usual. The genitalia differ as shown in the plates.

Sub-sp. **brenda** Evans 1942: ♂ Paramba, Ecuador: type B.M.

B.M. 81 ♂ 20 ♀ Ecuador (Paramba, Loja. Esmeralda. Baños. Chimbo. Bellavista. Zamora. Ambato). 12 ♂ 2 ♀ Peru (Trujillo. Arequipa. Catamarca. Chosica. W. Andes of N. Peru).

12 (2b). F hyaline spots in spaces 6–8 produced into space 9. Above, markings broad, postdiscal and submarginal spots present, as well as spots in spaces 4, 5 just after end of cell. Unh central white band much distorted and narrowed tornally. ♂ with costal fold and tibial tuft.

americanus. 2 sub-species.

(a). Smaller, ♂ F 14 mm.: markings less prominent. ♀ uph markings faint. Dorsal part of genitalia clasp inwardly plain.

Sub-sp. **americanus** Blanchard 1852: Chili: figured. Fig Seitz.

B.M. 38 ♂ 8 ♀ Chili.

(b). Larger, ♂ F 15 mm.: markings very broad in ♂ and ♀. Dorsal part of clasp inwardly toothed.

Sub-sp. **bellatrix** Plötz 1884: ♂ Argentine. Fig Seitz: Hayward 1948, ♂ ♀ and genitalia.

B.M. 1 ♂ Petropolis, S. Brazil. 2 ♂ 2 ♀ Paraguay. 2 ♂ 2 ♀ Uruguay. 44 ♂ 44 ♀ Argentine.

G.2. HELIOPETES Billberg 1820: type *arsalte* Linnaeus: sole valid species included was *niveus* Cramer, which is a synonym of *arsalte*.
Synonym. *Leucoscirtes* Scudder 1872: type *ericetorum* Boisduval: fixed by the author.

The genus is structurally inseparable from *Pyrgus* and the only distinguishing character is the facies: spotted in *Pyrgus*: white or white banded in *Heliopetes*: *americanus* in *Pyrgus* and *domicella* in *Heliopetes* are connecting links with very similar genitalia. All males have a costal fold upf and a hair tuft on the hind tibiae fitting into a thoracic pouch. Antennal nudum 12–14 segments.

The construction of a key to the species is a difficult matter as the range of individual or seasonal variation in many of the species is very great, grading perhaps from an unmarked white form to one with a white spotted, broad, black apex upf.

1a (6a). Below, veins not darkened, antennae plain white or pale yellow and palpi mostly white.

1b (3a). Unh the large dark spot mid costa is at right angles to the costa and is directed to the tornus.

1 (2). Unf basal third dark. ♂ ♀ above, dark brown with a broad central white band.

domicella. 3 sub-species.

(a). Upf white band runs full width to costa: double white spot beyond end cell usually absent. ♂ F 17 mm.

Sub-sp. **domicella** Erichson 1848: Br Guiana. Fig Holland: Seitz (= *willi*): genitalia by Lindsey, etc.
Synonyms. *nearchus* Edwards 1882: ♂ Arizona.
aconita Plötz 1884: Georgia.
B.M. 4 ♂ Texas. 5 ♂ Arizona. 14 ♂ 3 ♀ Mexico. 1 ♂ 2 ♀ Nicaragua. 6 ♂ 3 ♀ Colombia. 14 ♂ 10 ♀ Venezuela.

(b). A small dark edition of *domicella*. ♂ F 15 mm.

Sub-sp. **margarita** Bell 1937: ♂ Margarita Is., Venezuela.
B.M. 9 ♂ 4 ♀ Margarita Is., Venezuela.

(c). Upf upper end of white band at costa consists of a small detached spot: always a conspicuous double white spot beyond end of cell. ♂ F 17 mm.

Sub-sp. **willi** Plötz 1884: ♂ Minas Geraes. Fig Seitz, as *domicella*: Hayward 1948, ♂ and genitalia.
B.M. 3 ♂ Bolivia. 1 ♂ 1 ♀ Lower Amazons. 20 ♂ 14 ♀ N. Brazil. 6 ♂ Minas Geraes. 2 ♂ 2 ♀ S. Brazil. 9 ♂ 8 ♀ Paraguay. 11 ♂ 8 ♀ Argentine.

2 (1). Unf basal third white. ♂ entirely white with faint markings: the zigzag postdiscal black band more or less apparent. ♀ resembles *domicella* and has the basal third upf dark: uph the white spots along the termen are preceded by a narrow dark zigzag band, then a narrow band of white postdiscal spots followed by a narrow postdiscal dark band. ♂ F 18 mm.

ericetorum Boisduval 1852: ♂ California: type B.M. Fig Oberthür 1912: Holland: Seitz: genitalia by Lindsey, etc.
Synonym. *alba* Edwards 1866: ♂ Arizona.
B.M. 34 ♂ 8 ♀ California. 6 ♂ 5 ♀ Arizona.

3a (1b). Unh the large dark spot mid costa is oblique and is directed to the base of the dorsum.
3 (4a). Unh the large dark spot mid costa is isolated, not extending beyond mid cell nor to the base of space 7 and is not united to the dark spot below lower end of cells. ♂ uph markings faint and cilia usually white, not chequered. ♂ F 14–17 mm.

macaira. 3 sub-species, with different clasps.
(a). End of cuiller multi-spined. The range of variation is not great on the upper side: dark apex F never wide enough to enclose white spots. But on the unh the variation is much greater: the darkest form has a broad, solid outer border, the sub-basal spots are large and the cilia brown: in the palest form the border is reduced and absent in spaces 4 and 5, the sub-basal markings are very small and the cilia white, chequered at ends of veins. In the B.M. series from Mexico the two extremes are completely connected by intergrades.

Sub-sp. **macaira** Reakirt: ♂ Mexico (dark form). Fig Seitz: Holland.
Synonyms. *nivea* Scudder 1872: ♂ Guatemala (pale form). *locutia* Hewitson 1875: ♂ Panama (dark form): type B.M.: figured.

eulalia Plötz 1885.
cnemus Godman & Salvin 1897: ♀ Mexico (very dark form): type B.M.: figured.
? *sublinea* Schaus 1902: Mexico.
B.M. 1 ♂ Texas. 71 ♂ 18 ♀ Mexico. 13 ♂ Guatemala. 1 ♂ Salvador. 7 ♂ 3 ♀ Honduras. 4 ♂ 2 ♀ Nicaragua. 19 ♂ 3 ♀ Costa Rica. 6 ♂ 2 ♀ Panama.

(b). End of cuiller with a single very long spine, like *macaira*, but the pale form may be unmarked white in ♂ and ♀.

Sub-sp. **nivella** Mabille 1883: ♂ Colombia: type B.M. Figs by Holland and Godman & Salvin refer to *macaira*, pale form.
B.M. 11 ♂ 3 ♀ Colombia. 18 ♂ 3 ♀ Venezuela. 2 ♂ Br Guiana.

(c). End of cuiller broadly blunt, not spined. The dark borders in the dark form comprise darkened veins without any tendency to form spots. Unh in pale forms the dark marking may be absent in both sexes, as in *nivella*.

Sub-sp. **orbigera** Mabille 1888: ♂ Brazil: figured.
Synonyms. *maimon* Fabricius of Plötz 1885, nec Fabricius, which is an Oriental Lycaenid. Fig Seitz.
macaroides Williams & Bell 1940: ♂ Bolivia: fig of genitalia.
B.M. 3 ♂ 1 ♀ Fr Guiana. 7 ♂ 1 ♀ Bolivia. 3 ♂ 3 ♀ Pará. 1 ♂ 2 ♀ Pernambuco. 3 ♂ 1 ♀ Bahia. 1 ♂ Porto Real. 1 ♀ Goyaz. 10 ♂ Matto Grosso. 2 ♂ Paraguay.

4a (3). Unh the upper and lower dark central spots are united to form a dark basal area, outwardly deeply indented.
4 (5). ♂ F cilia conspicuously chequered. Generally resembles *macaira* but the genitalia are very different, *vide* diagrams. ♂ F 15–16 mm.

omrina Butler 1870: ♂ Peru (pale form): type B.M. Fig as *pastor* in Seitz: Hayward 1948, ♂ (light and dark forms) and genitalia.
Synonyms. *pampina* Plötz 1886: ♂ Argentine (pale form). Fig Seitz.
intensa Draudt 1923: ♂ Bolivia (dark form): figured.
B.M. 1 ♂ Panama. 17 ♂ 5 ♀ Ecuador (Loja. Zamora). 15 ♂ 6 ♀ Peru (W. Andes. Huancabamba. Manchara).

11 ♂ 1 ♀ C. Peru (Chanchamayo. Pozuzo. Amazonas). 16 ♂ 2 ♀ Bolivia (La Paz. Santa Cruz. Tanampaya). 2 ♂ Maranham. 5 ♂ 3 ♀ Pernambuco. 1 ♂ Ceara. 7 ♂ 6 ♀ Bahia. 5 ♂ 5 ♀ Minas Geraes. 6 ♂ 1 ♀ Matto Grosso. 26 ♂ 14 ♀ S. Brazil. 13 ♂ 13 ♀ Paraguay. 17 ♂ 13 ♀ Argentine.

5 (4). F cilia not, or very obscurely, chequered. Wings broader. Upf resembles *alana* in having in dark forms a broad, white spotted, dark apical area. Unh with conspicuous sub-basal and postdiscal dark areas, resembling *omrina*. ♂ F 17–20 mm.

laviana. 3 sub-species.

(a). Upf dark apex narrow, not nearly reaching end of cell and its inner edge directed to mid termen. Unh the outer dark area inwardly bordered by an unbroken straight white line.

Sub-sp. **laviana** Hewitson 1868: ♂ Nicaragua: type B.M. Fig Hewitson 1875: Seitz: Holland: genitalia by Lindsey, etc.

Synonyms. *pastor* Felder 1869: ♂ Mexico. Fig in Seitz = *omrina*.

oceanus Edwards 1870: ♀ Arizona.

dividua Röber 1925: ♂ W. Colombia.

B.M. 1 ♂ Texas. 1 ♂ 1 ♀ California. 39 ♂ 8 ♀ Mexico. 6 ♂ 1 ♀ Guatemala. 3 ♂ Honduras. 2 ♂ Nicaragua. 7 ♂ 1 ♀ Costa Rica. 1 ♂ Panama. 75 ♂ 13 ♀ Colombia. 18 ♂ 4 ♀ Venezuela.

(b). Similar, but upf the dark apical area broader, its inner edge usually directed to tornus and the spots on the dark apex are smaller.

Sub-sp. **leca** Butler 1870: ♂ Venezuela: type B.M.

B.M. 6 ♂ 3 ♀ Venezuela. 5 ♂ 1 ♀ Ecuador (Loja. Zamora). 4 ♂ 5 ♀ Peru (Chosica, Chanchamayo. Lima).

(c). Above with a brilliant mother-of-pearl sheen. As *laviana*, but unh the white line inwardly bordering the outer dark area is sharply angled at vein 5 and there is a broad white streak running through the angulation from cell to termen.

Sub-sp. **libra** Evans 1944: ♂ Matto Grosso: type B.M. Fig Hayward 1948, ♂ ♀ and genitalia.

B.M. 3 ♂ Panama. 2 ♀ Colombia (? wrong labels). 28 ♂ Peru (Tarapote. La Merced. Perene. Carabaya. Chanchamayo). 14 ♂ Bolivia (Santa Cruz. Cochabamba. Chariplaya. Bueyes). 3 ♂ Pará. 7 ♂ Matto Grosso. 1 ♂ Minas Geraes. 21 ♂ 6 ♀ S. Brazil (Rio. Paraná. Novo Friborgo. São Paulo). 15 ♂ Paraguay. 18 ♂ 11 ♀ Argentine.

6a (1a). Below, veins more or less darkened: antennae black, more or less minutely chequered.

6b (8a). Below, palpi white.

6 (7). Unf costa white throughout. Upf with a broad, white spotted, black apex. Uph with terminal black-edged white spots, preceded by, and well separated from, an irregular dark discal line. ♂ F 18 mm.

purgia Schaus 1902: ♂ Castro, Paraná.

Synonyms. *concinnata* Mabille 1904: ♂ Rio Grande: type B.M.

ochroleuca Zikan 1938: ♂ Virginia, Brazil.

B.M. 6 ♂ 4 ♀ Castro, Paraná.

7 (6). Unf costa orange at base and then darkened up to end of vein 12.

arsalte. 2 sub-species.

(a). Above, varies from an entirely white form with the ends of the veins darkened more or less, to a form with a white banded dark apex upf and more or less developed submarginal white spots: in ♀ uph may be much darkened and all the veins dark. Unf variable but never with an enclosed white band in the darkened apex. Unh veins usually darkened, but more pronouncedly vein 2 and along cubitus to base, vein 1a and a dark streak along the base of the costa: these markings resemble in a remarkable manner those of the South African *Leucochitonea levubu* Wallengren. Cilia chequered black and white. ♂ F 15–20 mm.

Sub-sp. **arsalte** Linnaeus 1758: ♂ Indiis: fig Clerck's Icones. Fig Seitz, pale form as *arsalte*, dark form as *petrus*: Godman & Salvin, ♂ and genitalia: Hayward 1948 ♂ and genitalia.

Synonyms. *niveus* Cramer 1775: ♂ Indiis: figured.

menalcas Fabricius 1775: Indiis.

crameri Billberg 1820: Surinam.
figara Butler 1870: ♀ ? loc: type B.M.
janice Ehrman 1907: ♂ Venezuela. Fig Holland 1927.
B.M. 30 ♂ 16 ♀ Mexico. 13 ♂ 5 ♀ Guatemala. 14 ♂ 8 ♀ Honduras. 1 ♂ 1 ♀ Salvador. 2 ♂ 2 ♀ Nicaragua. 12 ♂ 6 ♀ Costa Rica. 15 ♂ 5 ♀ Panama. 17 ♂ 7 ♀ Venezuela. 12 ♂ 8 ♀ Trinidad. 1 ♂ Jamaica. 9 ♂ 15 ♀ Br Guiana. 2 ♂ 1 ♀ Surinam. 27 ♂ 7 ♀ Fr Guiana. 2 ♂ Ecuador (Loja). 2 ♂ Rio Negro. 22 ♂ 4 ♀ Peru. 19 ♂ 1 ♀ Bolivia. 26 ♂ 24 ♀ Amazons. 11 ♂ 11 ♀ Pará. 2 ♂ 2 ♀ Maranham. 2 ♂ Ceara. 5 ♂ 5 ♀ Pernambuco. 6 ♂ Minas Geraes. 2 ♂ 2 ♀ Goyaz. 16 ♂ 2 ♀ Matto Grosso. 21 ♂ 15 ♀ S. Brazil. 10 ♂ 12 ♀ Paraguay. 4 ♂ 2 ♀ Argentine.
(b). ♂ ♀ upf with a broad, white banded, black apex reaching the dorsum. Uph with a broad dark border; cilia brown, white at tornus. Unf costa dark to apex ♂ F 17 mm.

Sub-sp. **marginata** Hayward 1940: ♂ Balzapamba, Ecuador. Synonym. *apex* Evans 1944: ♂ W. Andes, N. Peru: type B.M.
B.M. 19 ♂ 2 ♀ Ecuador (Paramba. Loja. Guayaquil. Archidona). 8 ♂ 1 ♀ N. Peru (W. Andes, 4,000 ft. Ayabaca Mts.).

8a (6b). Below, palpi (and pectus) black, sometimes with an admixture of white hairs. Below, cilia mostly brown outwardly, white inwardly between the ends of the veins. Unh all veins black.
8b (10a). Unh discocellular veins at end of cell black: also a black vein-like streak from base, through mid cell to termen, as well as a similar streak between veins 1b and 2.
8 (9). Unf (and more or less upf) the inner part of the dark apical area does not extend beyond vein 8, spaces 8 to 11 are white, cut by black veins. Unh base of costa and dorsum shaded orange-brown. End of cuiller pointed and not spined. ♂ F 17 mm.

leucola Hewitson 1868: ♂ Minas Geraes: type B.M. Fig Hewitson 1875: Seitz (very poorly): Hayward 1948 is of *randa*.

Synonym. *asna* Evans 1944: ♂ Paraná: type B.M.
B.M. 1 ♂ Minas Geraes. 6 ♂ 1 ♀ São Paulo. 4 ♂ 3 ♀ Paraná.

9 (8). Unf (and upf) the inner part of the dark apical area runs through to the costa as usual, obliterating the white interspaces between veins 8 and 11. Unh yellow more or less shaded brown. End of cuiller pointed, as heavily spined as in *petrus*. ♂ F 17–20 mm.

randa nov: ♂ São Paulo, Alto da Serra; Feb 1927: R. Spitz: type B.M. Fig Hayward 1933 as *petrus*: Hayward 1948, as *leucola*, ♂ and genitalia.
B.M. 1 ♂ Colombia. 3 ♂ Minas Geraes. 1 ♂ Matto Grosso. 33 ♂ 12 ♀ S. Brazil (Espirito Santo. Rio. São Paulo. Novo Friborgo. Paraná). 1 ♂ 1 ♀ Argentine.

10a (8b). Unh the additional dark streaks absent, but occasionally vein 5 and the end of the cell are darkened.
10 (11a). Unh the cubitus from base forking along veins 2 and 4 to termen much more broadly darker than the other veins. End of cuiller pointed and heavily spined. Unh generally white, without any darkened areas. ♂ F 17–20 mm.

petrus Hübner 1819: ♂ no loc: figured by Hübner 1807, plate 159, fig 1 and 2 (not 3 and 4) as *niveus*. Fig Staudinger 1888 is *alana*: Seitz is *arsalte*: Hayward 1933 is *randa*.
Synonyms. *laginia* Hewitson 1868: for Hübner's figs 1 and 2 on plate 159.
marginalis Plötz 1885: ♀ Peru: Fig Seitz.
bianca Plötz 1885: S. America: fide Godman 1907.
B.M. 1 ♂ 3 ♀ Peru (Moyabamba. Perene. La Merced). 2 ♂ 1 ♀ Iquitos. 1 ♂ 1 ♀ Obidos. 8 ♂ 2 ♀ Pará. 3 ♂ Minas Geraes. 1 ♀ Novo Friborgo.

11a (10). Unh all veins equally dark.
11 (12). Uph (and unh) with a broad dark arcuate border from end of vein 2 to end of vein 7. Cuiller of clasp as in *petrus*. In other respects as *alana* and having 2 forms, one with a nearly plain unh and a heavy dark apex

on upf and unf, the other with a blotched unh and a lighter apex F. ♂ F 16–18 mm. On their genitalia and distribution *randa*, *petrus* and *chimbo* might be regarded as sub-species, but their very different facies seems to render such a view untenable.

chimbo nov: ♂ Chimbo, Ecuador: W. F. Rosenberg: type B.M.
B.M. 5 ♂ 3 ♀ Ecuador (Chimbo. Santa Rosa. Quito. Balzapamba. Ambato). 1 ♂ W. Ecuador.

12 (11). Uph (and unh) with no such dark border: rarely in ♀ there may be a narrow dark border from costa to dorsum. Tip of cuiller blunt and serrate. ♂ F 16–20 mm. Very variable but not sub-specifically. Unh usually with dark areas, ranging from conspicuous irregular areas above and below the cell and against termen in spaces 3–4 and 6, to only traces below end of cell: ground colour brownish-yellow to white. Upf always with a dark apical area reaching the dorsum and crossed by a more or less distinct macular white band, followed sometimes by white terminal dots.

alana Reakirt 1868: ♀ Colombia. Fig Staudinger 1888 as *petrus*: Godman & Salvin: Seitz: Hayward 1933 and 1948, ♂ and genitalia.
Synonyms. *ligania* Plötz 1885: S. America. Fig Seitz. *adusta* Plötz 1885: S. America.
B.M. 20 ♂ 4 ♀ Mexico. 16 ♂ 2 ♀ Guatemala. 5 ♂ Honduras. 1 ♀ Salvador. 4 ♂ 3 ♀ Nicaragua. 13 ♂ 5 ♀ Costa Rica. 4 ♂ 2 ♀ Panama. 34 ♂ 8 ♀ Colombia. 31 ♂ 5 ♀ Venezuela. 8 ♂ 2 ♀ Br Guiana. 1 ♂ 1 ♀ Surinam. 1 ♂ 4 ♀ Fr Guiana. 10 ♂ 5 ♀ Ecuador (Paramba. Zamora. Canelos. Loja. Archidona). 12 ♂ 2 ♀ Peru (Chanchamayo. Cuzco. Huallaga. Perene. Carabaya. Ucayali). 22 ♂ 2 ♀ Bolivia (La Paz. Santa Cruz. Chulumani. Reyes. Buenavista). 33 ♂ 11 ♀ Upper Amazons. (Iquitos. Pebas to Obidos). 6 ♂ 4 ♀ Pará. 1 ♀ Ceara. 5 ♂ 1 ♀ Bahia. 1 ♂ Goyaz. 9 ♂ 1 ♀ Minas Geraes. 8 ♂ 3 ♀ Matto Grosso. 21 ♂ 4 ♀ S. Brazil (Rio. São Paulo. Paraná to Rio Grande do Sul). 9 ♂ 3 ♀ Paraguay. 1 ♂ 1 ♀ Argentine.

G.3. CELOTES Godman & Salvin 1899: type *nessus* Edwards: sole species included.

Antennae < ½ costa: shaft chequered: slightly obtuse from beginning of the nudum of 11 segments: apiculus flattened, blunt: apiculus > rest of club. Palpi long, pendulous. Wings rounded: H crenulate: cilia chequered: abdomen as long as dorsum. Uncus bifid: clasp with a style. ♂ with a costal fold: H tibiae with a tuft fitting into a thoracic pouch.

Single species. ♂ F 11 mm. Variegated dark and pale brown with small hyaline spots F and H. Recalls species of the Palaearctic genus *Carcharodus*.

nessus Edwards 1877: ♂ Texas. Fig Godman & Salvin: Holland: Seitz: genitalia by Lindsey, Bell & Williams.
Synonyms. *notabilis* Strecker 1877: ♂ Texas.
radiatus Plötz 1884: Texas.
B.M. 11 ♂ 1 ♀ Arizona. 8 ♂ 2 ♀ Texas. 1 ♂ 2 ♀ Mexico (N. Sonora. Durango). 1 ♂ "Br Guiana".

G.4. PHOLISORA Scudder 1872: type *catullus* Fabricius: fixed by author.
Synonym. *Hesperopsis* Dyar 1905: type *alpheus* Edwards: fixed by author.

Antennae shorter than half costa: shaft chequered: apiculus flattened, blunt. Palpi long, pendulous, white below. Wings rounded: greatest extent of H at end of vein 6: vein 1a < vein 8. Abdomen as long as dorsum. ♂ no tuft on hind tibiae. Upf more or less white spotted, but such spots are often not hyaline. Believed to be able to sit with their wings erect.

1a (3a). Unh without markings. ♂ with a costal fold. Cilia brown, not chequered. ♂ F 12–14 mm.
1 (2). Unh plain brown. Gnathos present: aedoeagus hooked. Antennae arcuate, nudum 12.

catullus Fabricius 1793: Indiis: fig Jones Icones. Fig Seitz: Holland: Wright: Comstock: genitalia by Lindsey, Bell & Williams.

B.M. 10 ♂ 9 ♀ Canada (B.C.). 104 ♂ 55 ♀ U.S.A. (Virginia. Oklahoma. New York. Washington. Idaho. Ohio. Delaware. Nevada. Iowa. N. Carolina. Utah. Montana. Pennsylvania. Colorado. California. Texas. Arizona). 3 ♂ Mexico (N. Sonora).

2 (1). Unh indigo blue with black veins. Gnathos absent: aedoeagus plain. Antennae similar.

mejicanus Reakirt 1866: Mexico. Fig Godman & Salvin: Seitz: genitalia by Lindsey, etc.: Holland.
B.M. 1 ♂ Colorado (Pikes Peak). 2 ♂ "Madison". 6 ♂ 2 ♀ New Mexico (Gallinas cañon). 16 ♂ 14 ♀ Mexico (Oaxaca. Guadalajara. Cordova. Durango. Jalisco. Cuernavaca. Lake Chapada. Puebla. Morelia).

3a (1a). Unh with markings. ♂ no costal fold.
3 (4). Cilia unchequered, white to pale brown. Apiculus of antennae arcuate, nudum 14. Unh greenish-brown with conspicuous white spots. ♂ F 12–15 mm.

libya Scudder 1878: ♂ Utah. Fig Holland: Seitz: Wright: Comstock: genitalia by Lindsey, etc.
Synonym. *lena* Edwards 1882: ♂ Montana. Fig Holland.
B.M. 28 ♀ 17 ♀ California. 1 ♀ Nevada. 1 ♀ Colorado. 30 ♂ 15 ♀ Arizona.

4 (3). Cilia chequered. Apiculus of antennae obtuse, nudum 10. Unh with very small white spots. Upf with grey scaling, leaving dark bands, recalling *Erynnis*. ♂ F 10–13 mm.

alpheus Edwards 1876: ♂ New Mexico. Fig Holland: Seitz: Wright: Comstock: genitalia by Lindsey, Bell & Williams.
Synonyms. *oricus* Edwards 1879: ♂ Nevada.
arizonensis Mabille & Boullet 1917: ♂ Arizona.
B.M. 27 ♂ 16 ♀ Arizona. 4 ♂ Colorado. 1 ♂ 1 ♀ Utah. 7 ♂ 1 ♀ California (small). 2 ♂ Mexico (Aguas Calientes).

ADDENDA and CORRIGENDA

to Parts I and II.

Part I, page viii and Part II, page 3. Certain amendments and additions are required to the bibliographical references, viz.: "Cuban Hesperiidae" by R. C. Williams (1931): "Butterflies of Cuba" by Marston Bates (1935): "Insects of Porto Rico and the Virgin Islands, Lep. Rhop", by W. P. Comstock (1944).

Aedeagus, wherever occurring, should be spelt aedoeagus.

Part I, page 72. The specimens of *Myscelus nobilis* in coll Felder came from the Lennep collection and the ♀ is almost certainly Cramer's type.

The above amendments are made at the instance of Prof. W. T. M. Forbes of Cornell University.

Corrigenda to Part I (from Mr. E. L. Bell of New York).

Pages 6, 7, 8, 89, for "*Apyrrhothrix*" read "*Apyrrothrix*".

Page 10, after line 12 from end, insert:

"(i). As *zenodorus*, but uncus flanges shorter than uncus. Collar red.

Sub-sp. **guianae** Bell 1932: ♂ Fr. Guiana: genitalia figured. B.M. None."

Line 11 from end, for "(i)" read "(j)".

Page 11, line 1, for "(j)" read "(k)".

Page 15, line 13, delete "more or less".

Line 15, for "**guianae**" to end of line read "**grinda** nov: British Guiana: type B.M.".

Line 16, delete "2 ♂ 2 ♀ Trinidad".

After line 16 insert:

"(f). As *grinda* but termen not white before cilia. Wings not excavate.

Sub-sp. **ronda** nov: ♂ Trinidad: type B.M.

B.M. 2 ♂ 2 ♀ Trinidad."

Line 17, for "(f)" read "(g)".

Line 22, for "(g)" read "(h)".

ADDENDA

Page 24, line 10 from end, for "Boullett" read "Boullet".
Page 30, line 9 from end, for "*boulletti*" read "*boulleti*".
Page 37, line 16, for "Hoffman" read "Hoffmann".
Page 37, line 7 from end, for "*cossaea*" read "*cossea*".
Page 38, line 12, delete "1948".
Page 39, line 10, alter "5" to "6".
Page 62, line 4, delete "1948".
Page 66, line 11 from end, for "1903" read "1908".
Page 77, between lines 7 and 8 insert:
Synonyms, *alsarius* Fabricius 1793: misspelling.
janthibaris (Latreille MS) Butler 1869.
Page 82, line 13 from end, for "1921" read "1931".
Page 86, line 1, for "1867" read "1862".
Page 89, column 2, line 13, for "*boulletti*" read "*boulleti*".

Corrigenda to Part II.

Page 121, line 7, for "1883" read "1833".

Page 126, line 12 from end and page 130, lines 3 and 21. The correct designation of the author is Abbot and Smith.

Page 131, line 9, for "**corusis**" read "**confusis**".

Page 126. **autochton electrus** Mabille 1891. By courtesy of Dr. E. M. Hering of the Zoologische Museum, Berlin, the type has been examined at the B.M. of *Plesioneura jao* Mabille 1889 (Le Nat 11:14), redescribed as *Telemiades iao* Mabille & Boullet 1912 (Ann Sci Nat Zool 9/16:114). The type is a ♂ from Pebas and is an aberration of *Autochton electrus* with identical genitalia and differing only in the reduction of the white band upf to a large spot in space 2, a small central cell spot and a faint upper spot in space 1b: on the unf the band is better developed. *jao* has 2 years priority and so must replace *electrus*.

Index. Alter guianae "A 1/7" to "A 1/2".
and insert "grinda. A 1/7" and "ronda. A 1/7".

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santa. E 24/3.
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Scantilla. E 32.
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sila. E 6/9.
silvia. F 13/4.
similis. E 32/10.
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Sophista. E 17.
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subalbata. E 43/1.
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subgisela. E 31/19.
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subornatus. E 43/1.
subostrina. E 21/9.
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Telemiades. E 6.
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Thanaos. F 16.
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titicaca. G 1/10.
toba. E 32/6.
tolimus. F 6/2.
tonga. E 21/7.
tornea. E 31/17.
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tosca. E 6/12.
Tosta. F 7.
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toxina. E 50/3.
toza. E 21/4.
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uniformis. E 22/2.
ustus. E 55/1.

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varius. F 6/1.
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varus. G 1/10.
vecina. E 21/5.
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verda. E 59/4.
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virgilius. F 16/10.
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willi. G 2/1.
wyandot. G 1/1.

xantho. E 6/11.
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xanthus. G 1/7.
Xenophanes. E 53.
Xispia. E 25.

zamia. E 21/9.
zampa. E 56/1.
zania. F 13/1.
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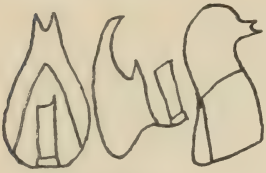
zephodes. F 15/2.
zephus. E 50/2.
Zera. E 38.
zera. E 38/2.
zethos. E 6/13.
zita. E 20/5.
ziza. E 31/13.
zonula. E 43/1.
Zopyrion. E 58.
zora. E 31/20.
zorilla. E 31/21

E.1. SPATHILEPIA



clonius

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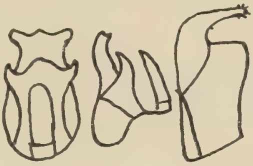

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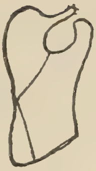

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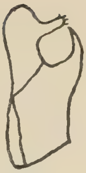

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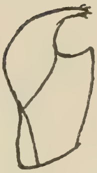
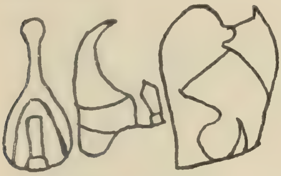


ochrolinea

E.3. JERA



tricuspidata

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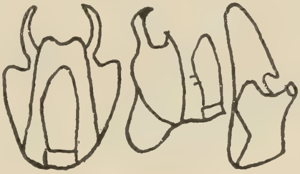

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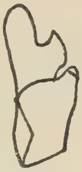

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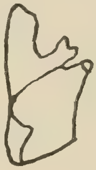
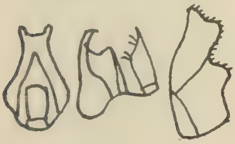
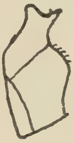


tamba

E.5. COGIA



1. hassan



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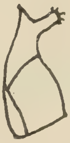

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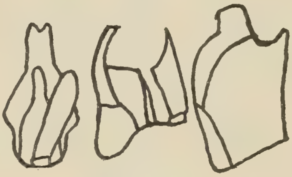

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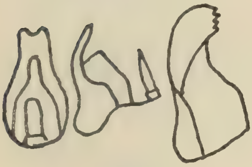

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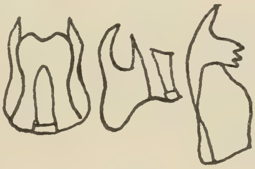
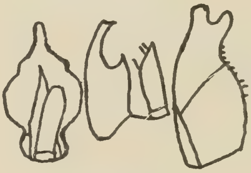


5. punctilia



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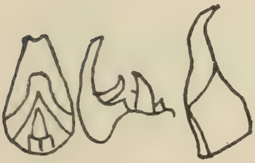

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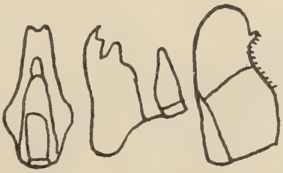

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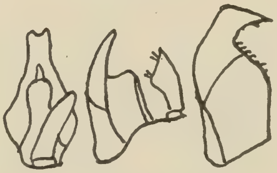

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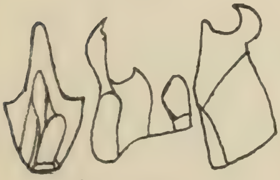

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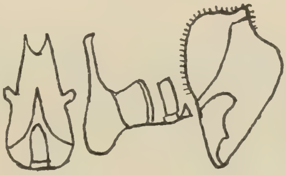

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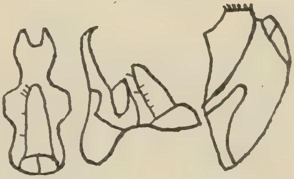

12. mala

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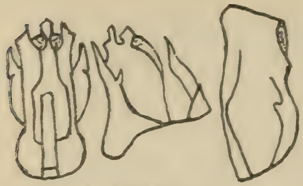
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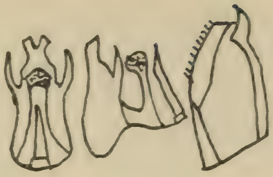
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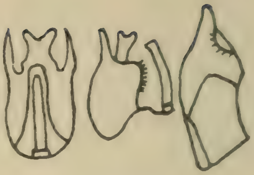
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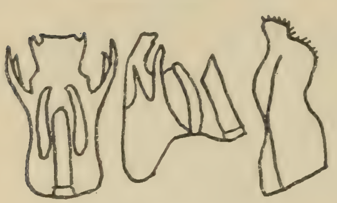
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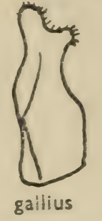
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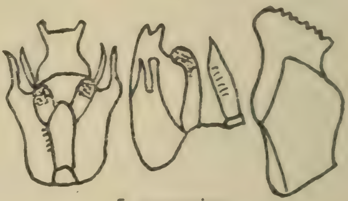
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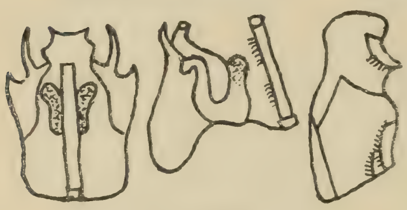
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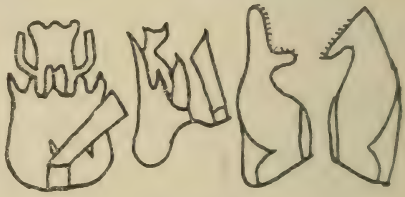
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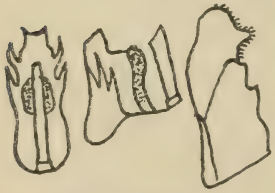
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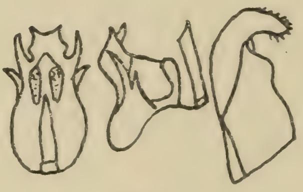
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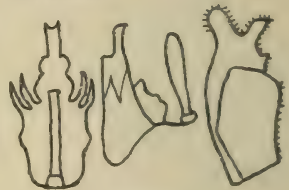
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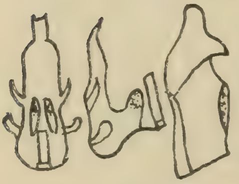
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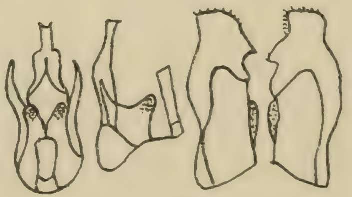
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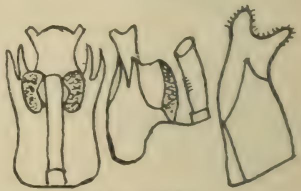
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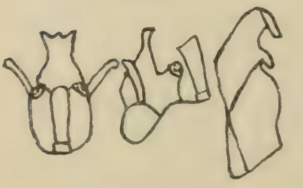
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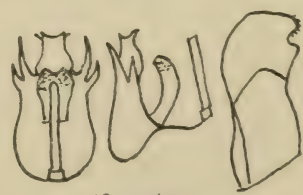
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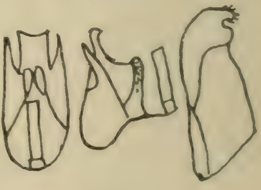
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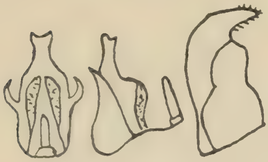
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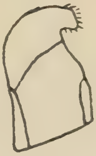
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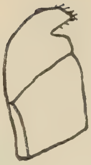
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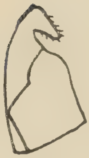
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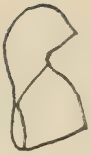
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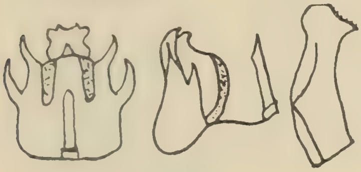
E 7 PYRDALUS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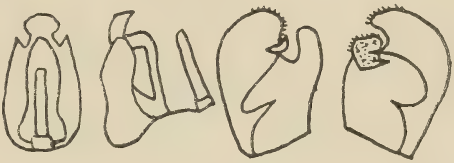
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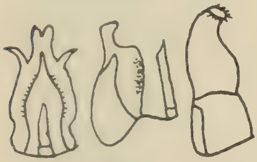
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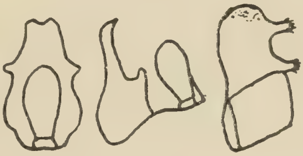
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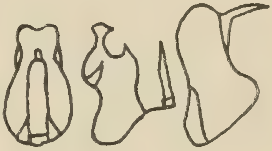
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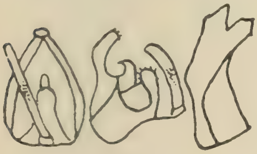
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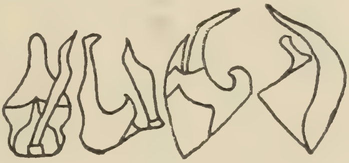
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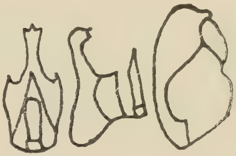
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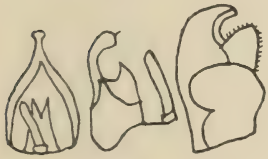
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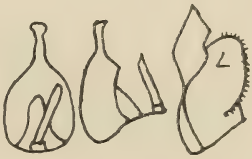
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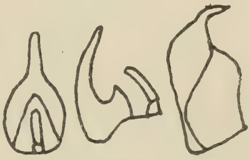
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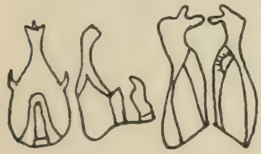
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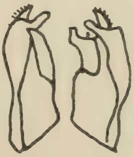
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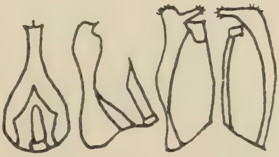
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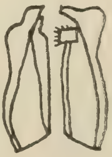
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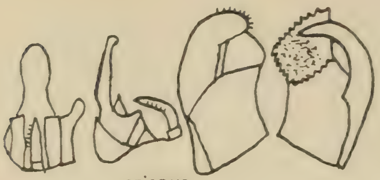

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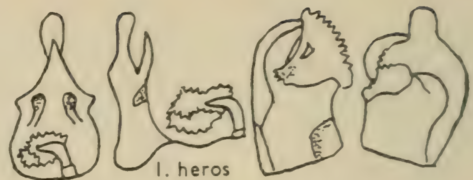

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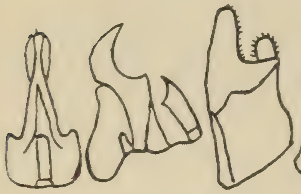

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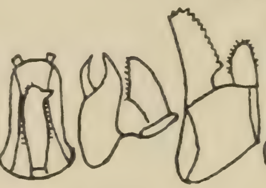

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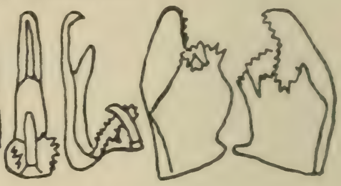

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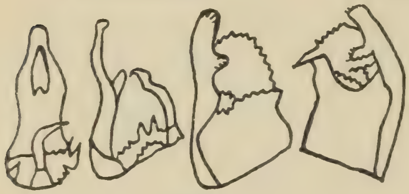

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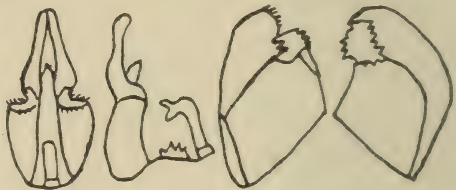

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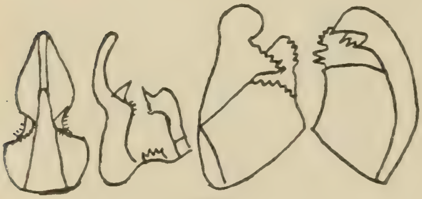

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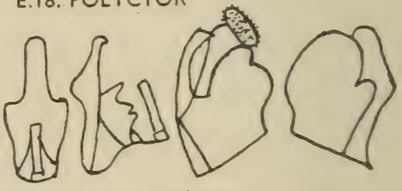

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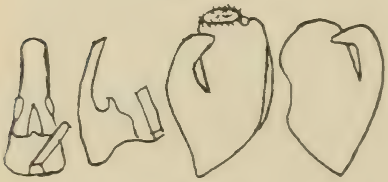

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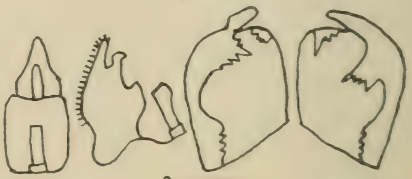

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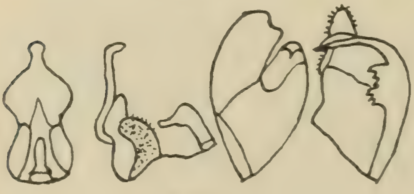

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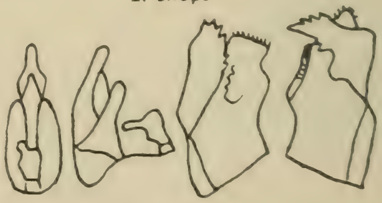

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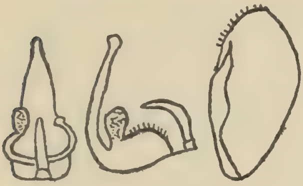

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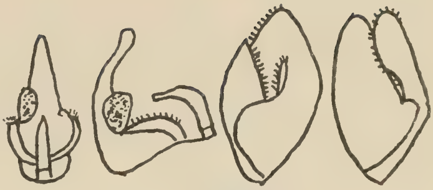

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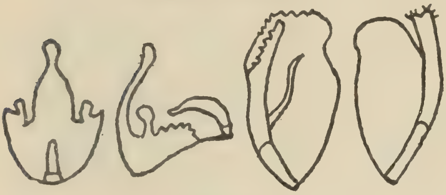

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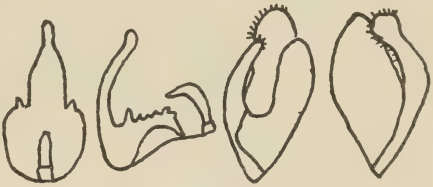

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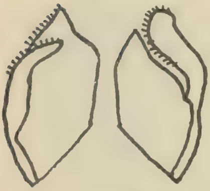

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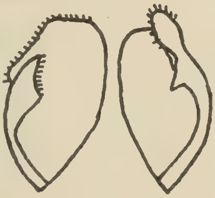

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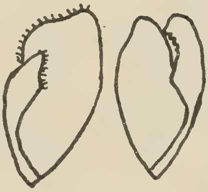

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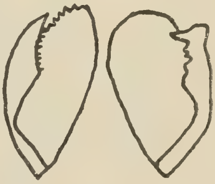

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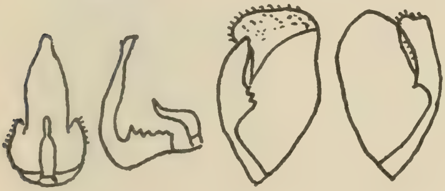

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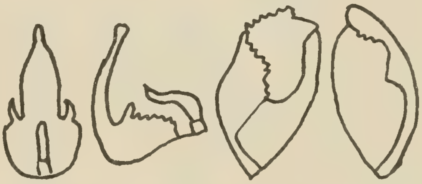

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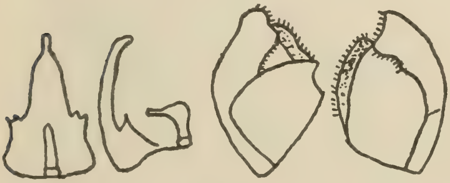

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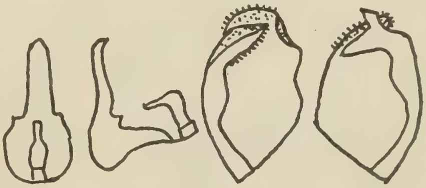

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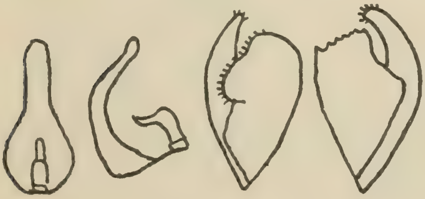

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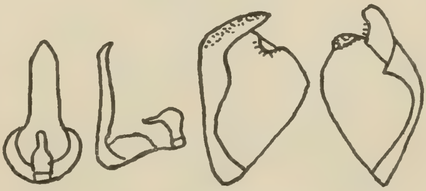

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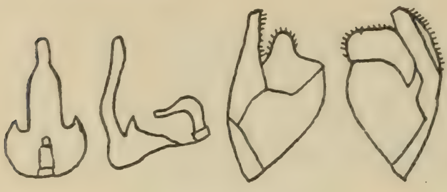

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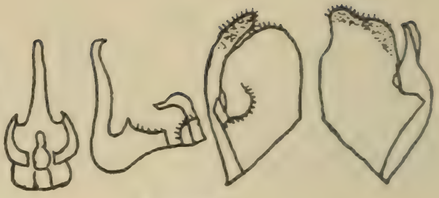

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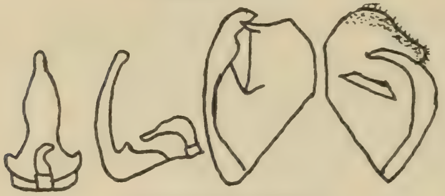

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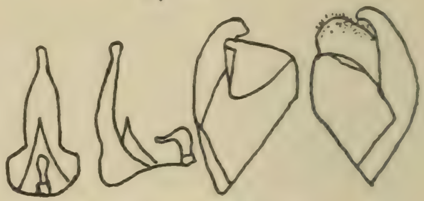

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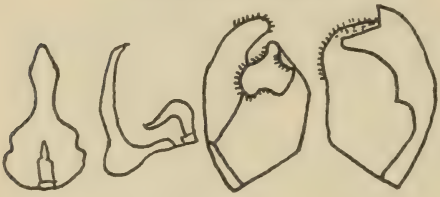

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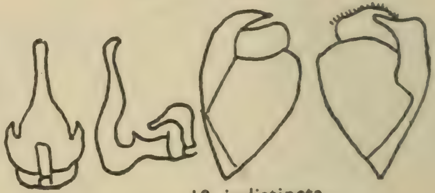

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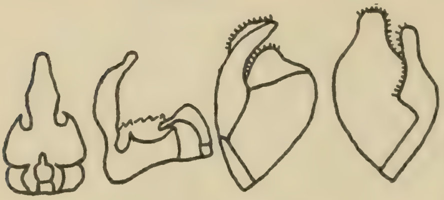

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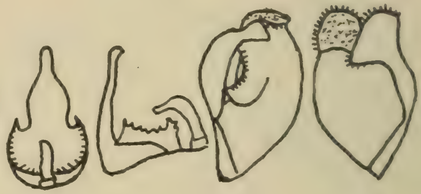

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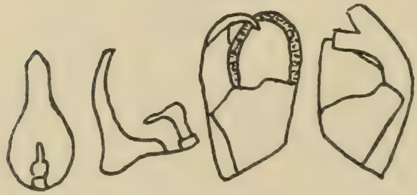

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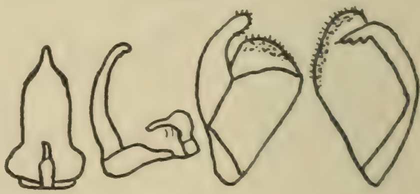

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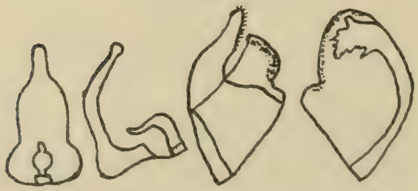

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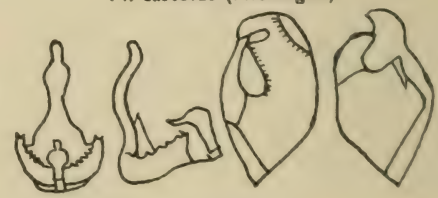

15. haywardi

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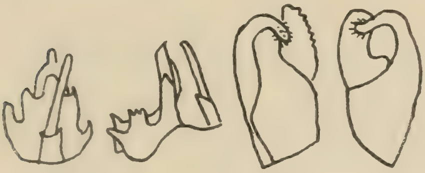

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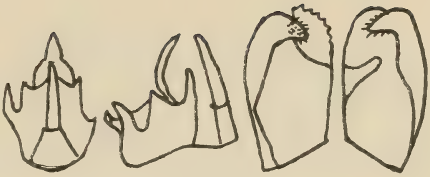

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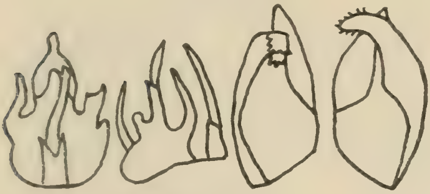

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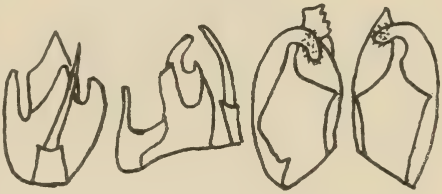

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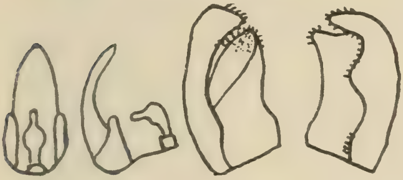

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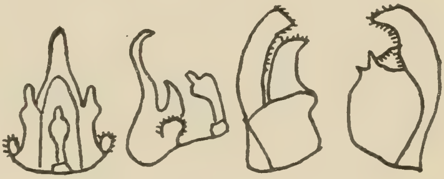

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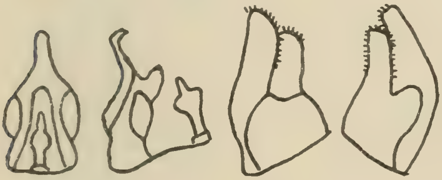

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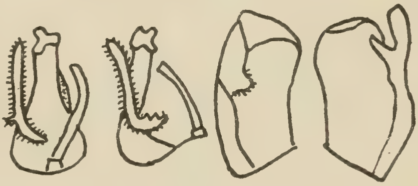

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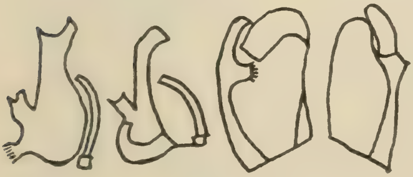

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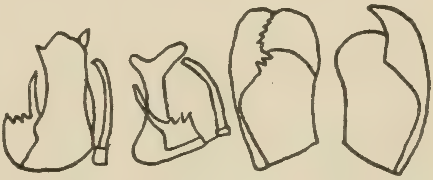

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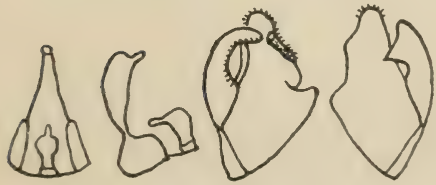
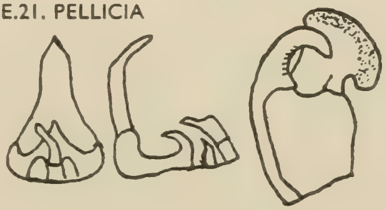


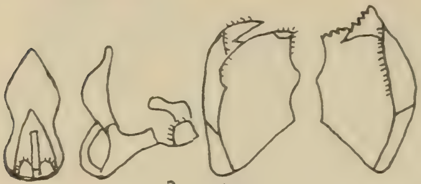
8. helena

E.21. PELLICIA



1. klugi

E.21. PELLICIA



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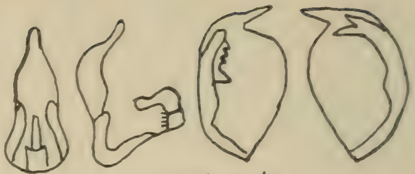

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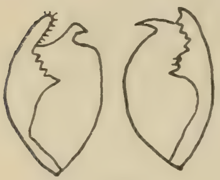

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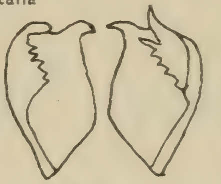

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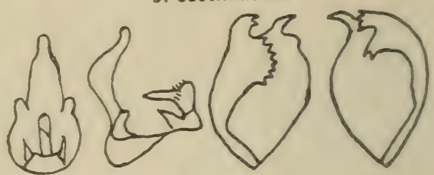

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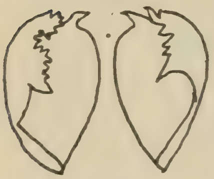

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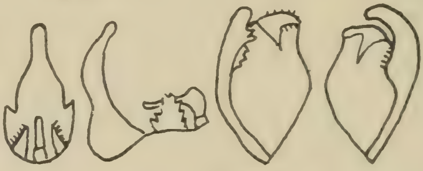

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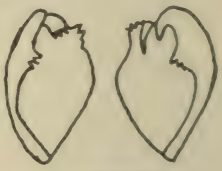

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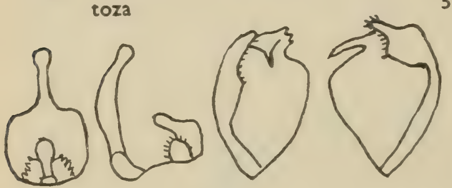

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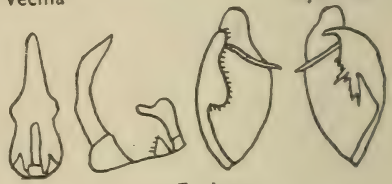

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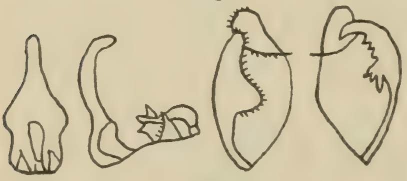

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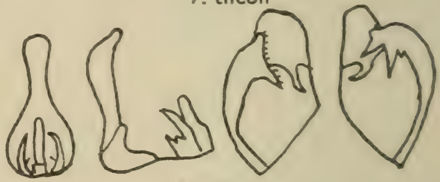

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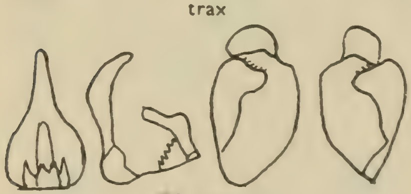

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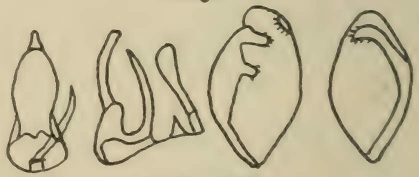

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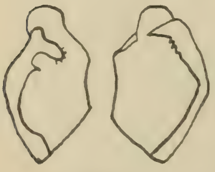

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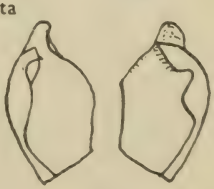

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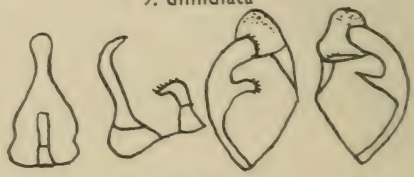

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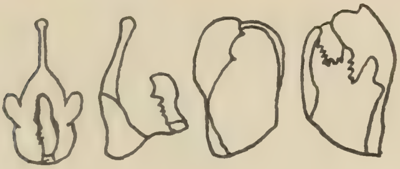
E.22. NOCTUANA



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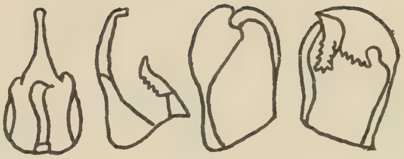

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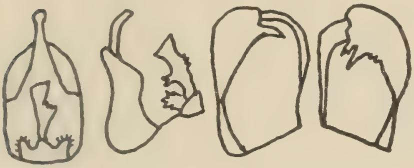

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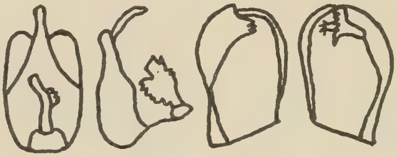

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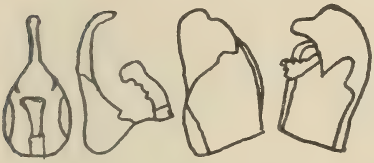

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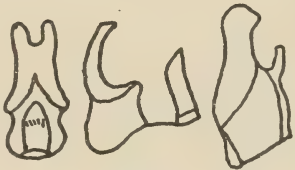

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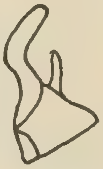
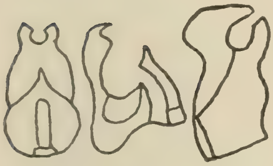


3. falisca

E.24. MYRINIA



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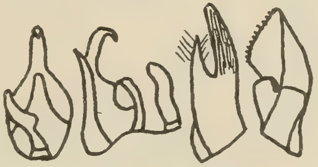

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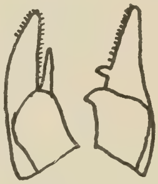
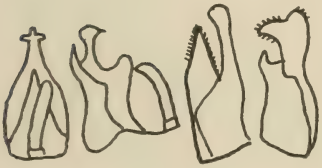


2. myris

E.25. XISPIA



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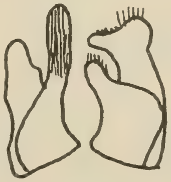

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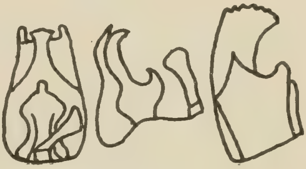
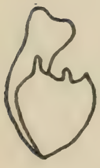


1. quadrata

E.26. OCELLA



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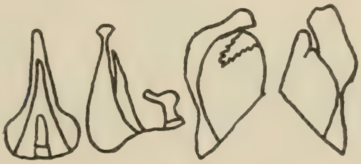

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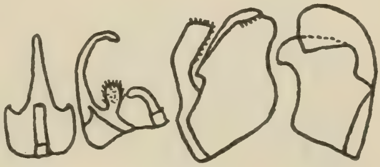
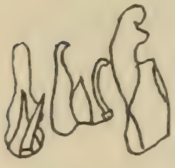


2. monophthalma

E.27. CYCLOSEMIA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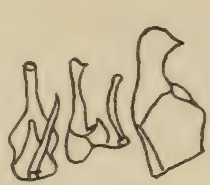
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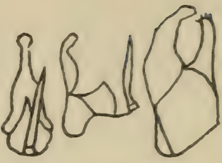
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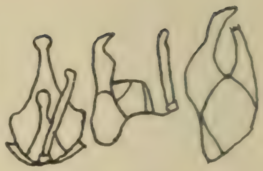
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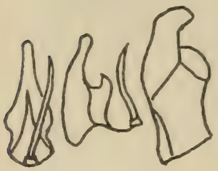
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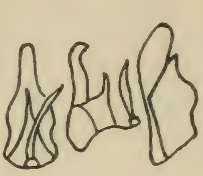
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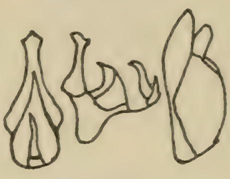
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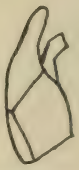
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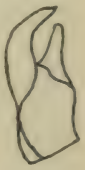
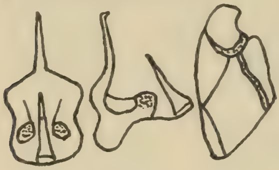

elelea

E.28. GORGOPAS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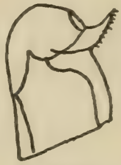
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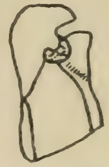
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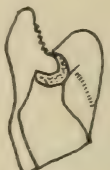
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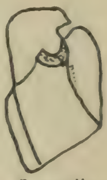
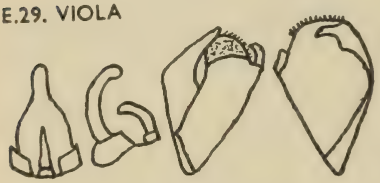

5. agylla

E.29. VIOLA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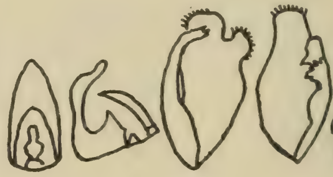
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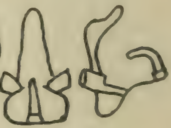
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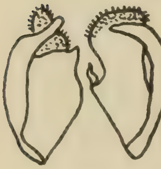
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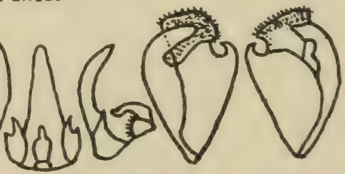
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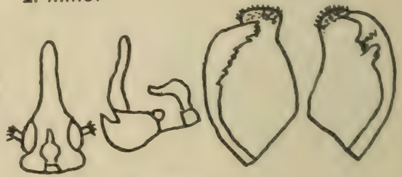
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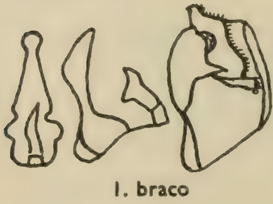
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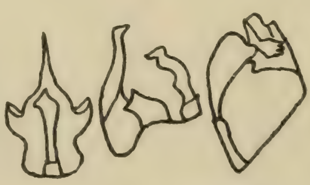
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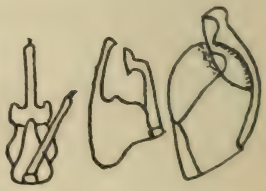
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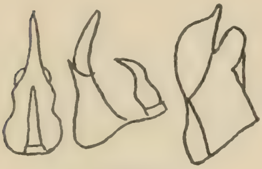
E.31. BOLLA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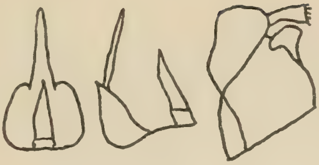
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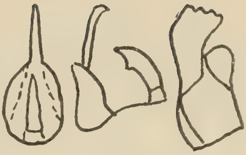
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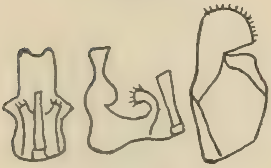
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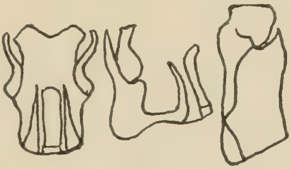
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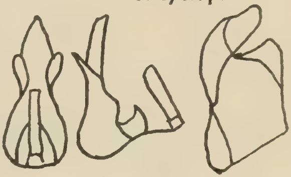
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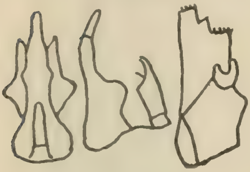
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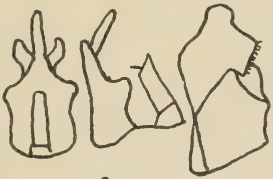
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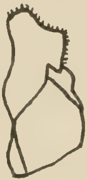
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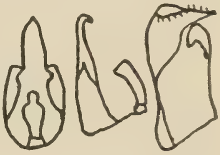
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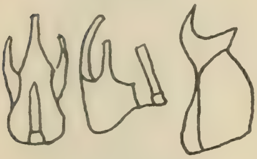
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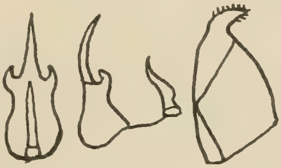
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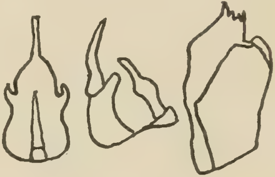
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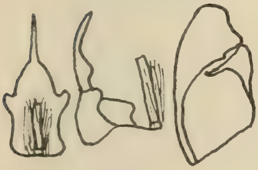
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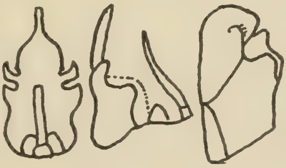
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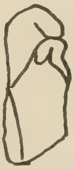
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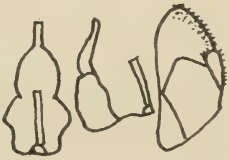
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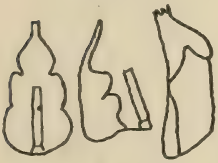
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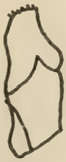
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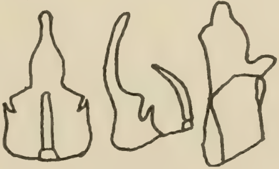
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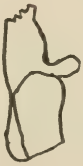
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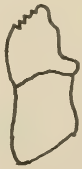
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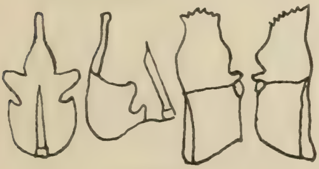
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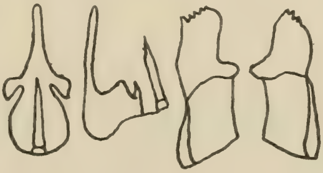
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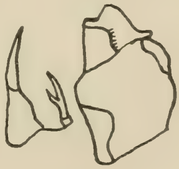
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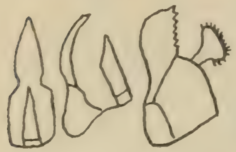
E.31. BOLLA



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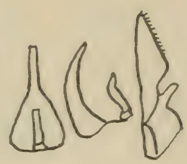

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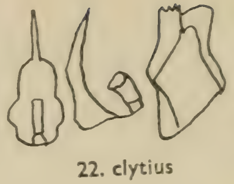

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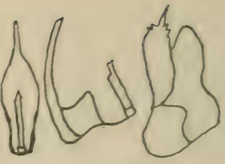

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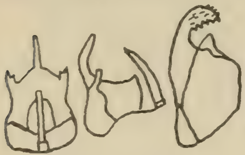
E.32. STAPHYLUS



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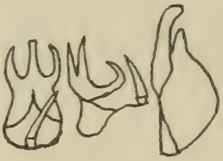

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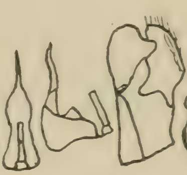

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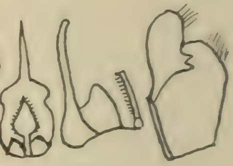

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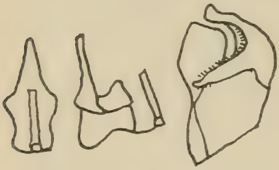

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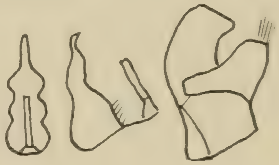

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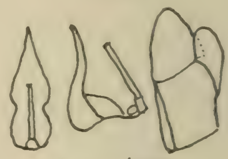

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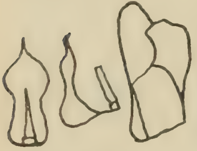

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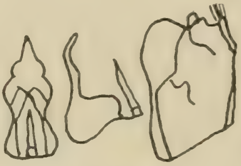

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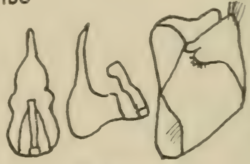

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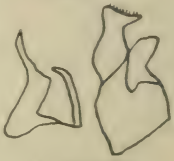

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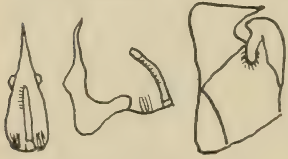

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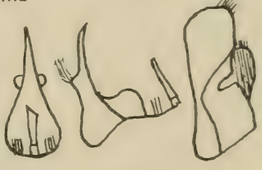

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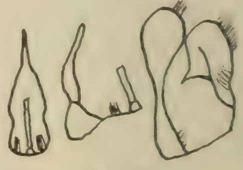

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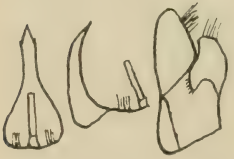

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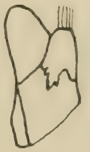

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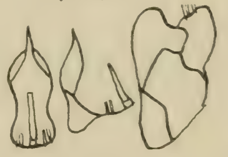

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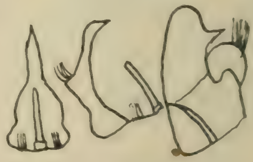

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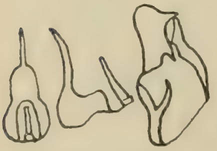

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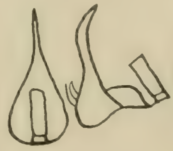

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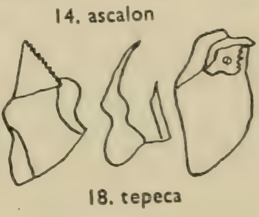

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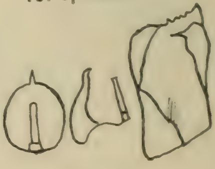
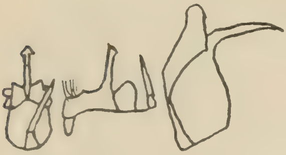


19. perna

E.32. STAPHYLUS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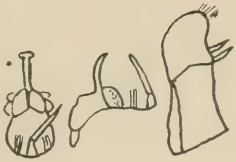
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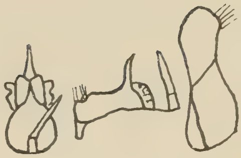
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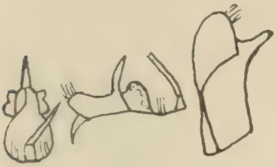
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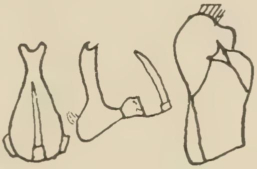
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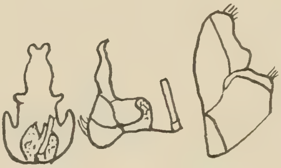
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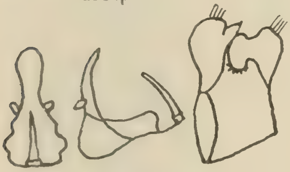
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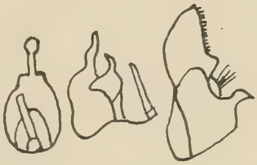
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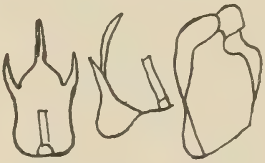
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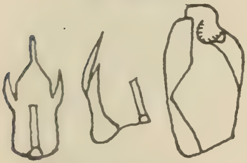
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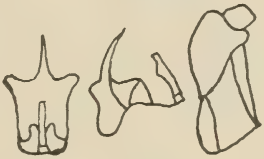
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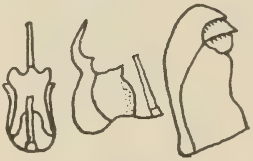
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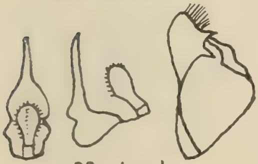
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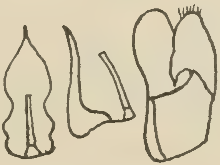
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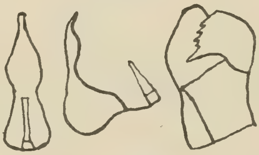
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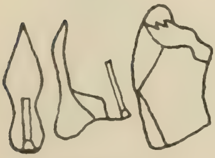
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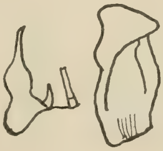
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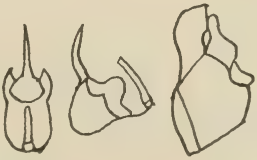
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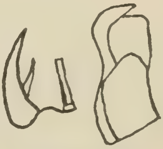
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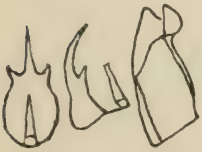
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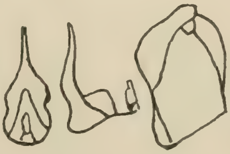
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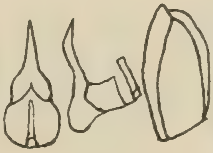
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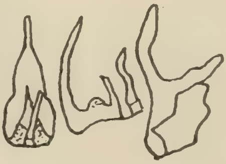
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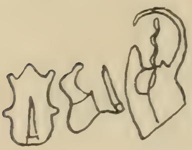

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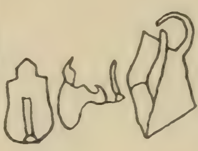
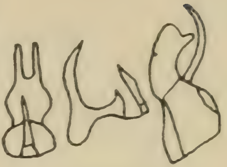


2 pulverea

E.34. TRINA



geometrina

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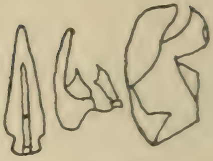
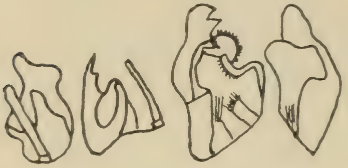


lacaena

E.36 GORGYTHION



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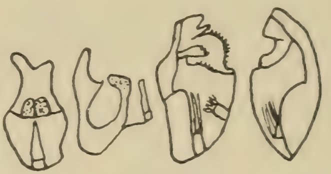

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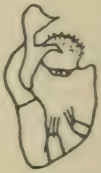

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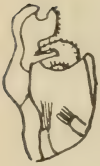

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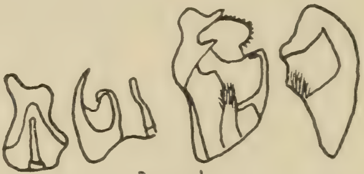

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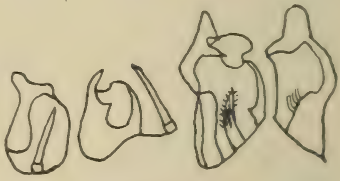
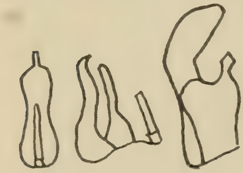
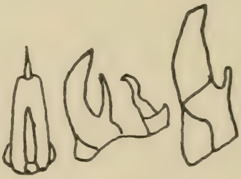


4. alcandra

E.37 OULEUS



I cyrna



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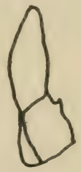

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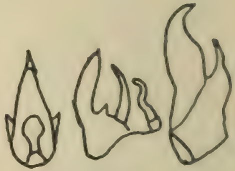
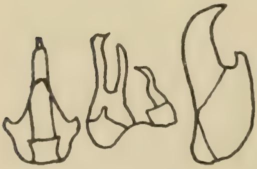
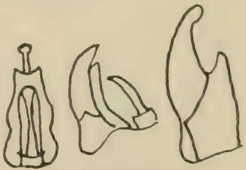


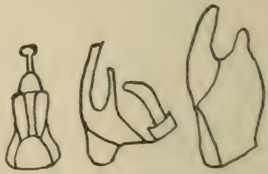
3. matria



4. fatinitza



5 fridericus



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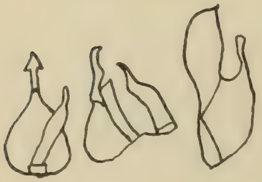
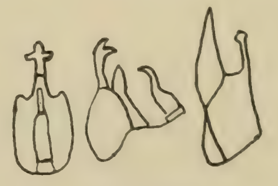


6. dilla



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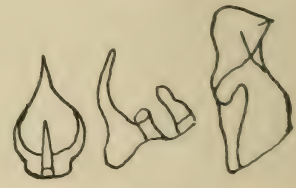
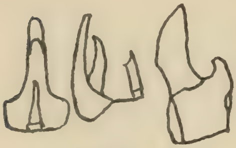


8. narycus

E.38. ZERA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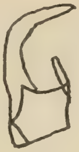
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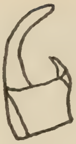
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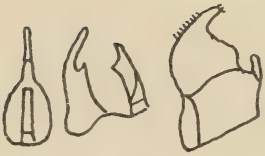
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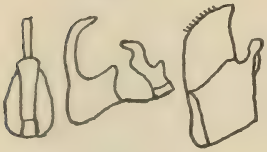
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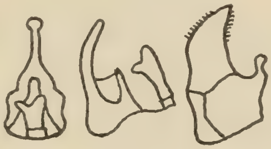
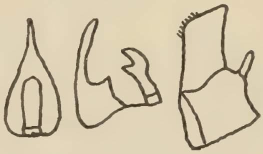
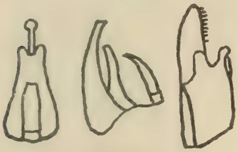
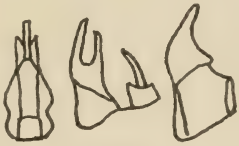
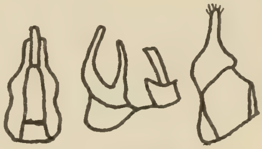

5. hyacinthinus

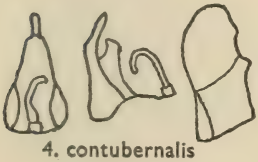

6. tetrastigma

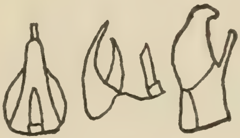
E.39. QUADRUS


1. cerealis


2. fanda


3. tros


4. contubernalis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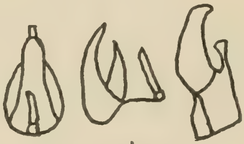
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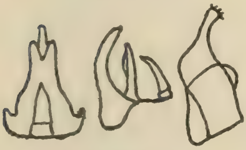
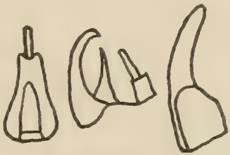

6. u-lucida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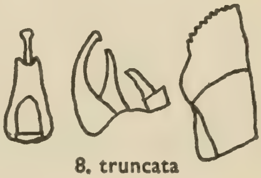
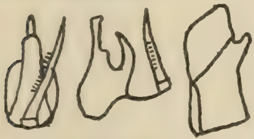

8. truncata

E.40. GINDANES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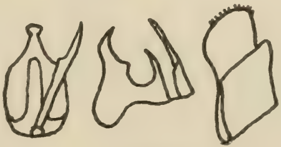
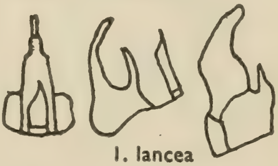
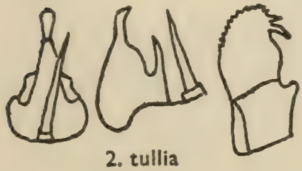
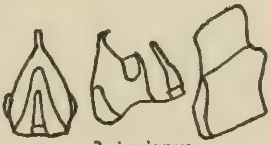
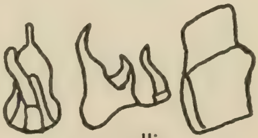

2. brebisson

E.41. PYTHONIDES

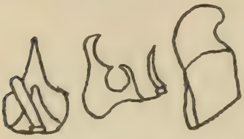

1. lancea

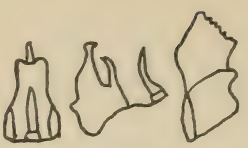

2. tullia

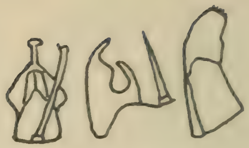

3. jovianus

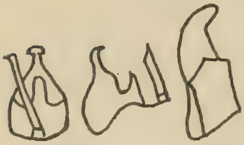

amaryllis

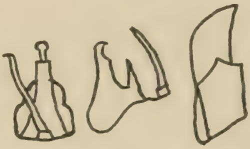
E.41. PYTHONIDES

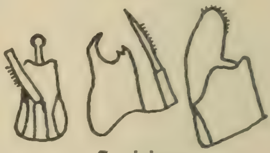

4. lerina

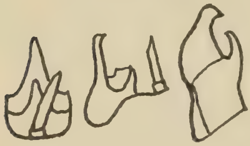

5. grandis

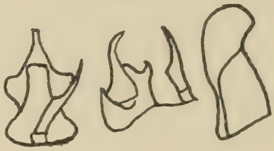

6. parallelus

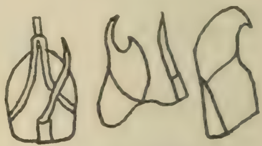

7. herennius


proxenus

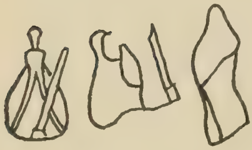

9. vicinus

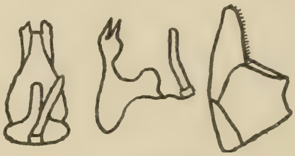

11. limaea

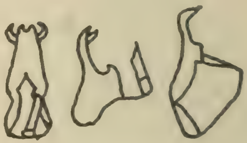

12. neivai

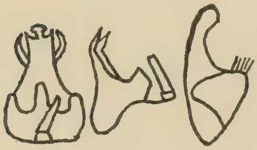

13. eminus

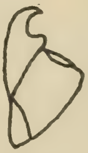
E.42. SOSTRATA

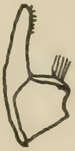

14. hampa

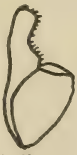

1. cronion

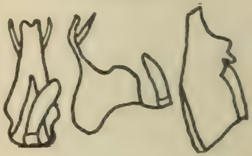

2. festiva


3. caerulans

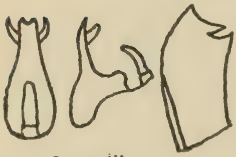

4. adamantinus

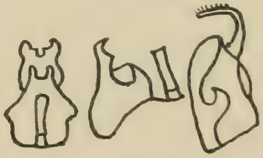

5. grippa

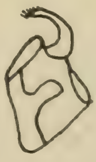

6. jinna


7. bifasciata

E.43. PACHES


8. pusilla


1. loxus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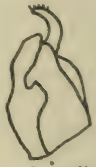
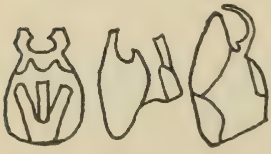
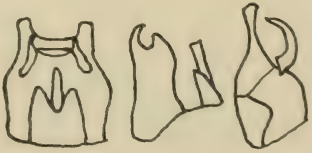
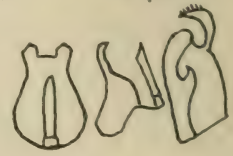
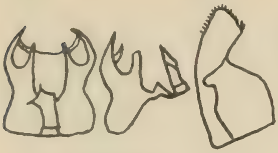

2. polla


3. trifasciatus

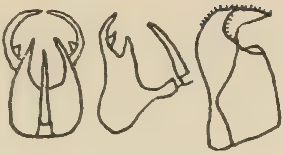

4. era


5. exosa

E.44. HAEMACTIS

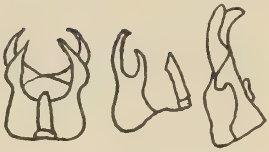


1. pyrrhosphenus

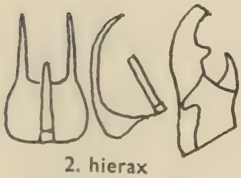


2. sanguinalis

E.45. ATARNES

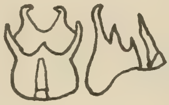


1. sallei

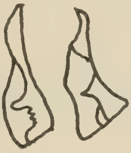


2. hierax

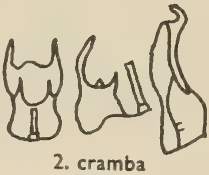
E.46. MILANION



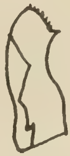
1. hemes



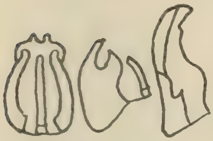
pemba



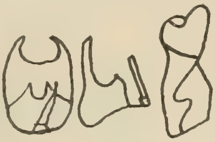
2. cramba



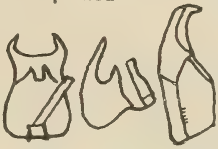
3. hemestinus



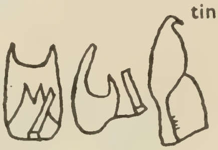
4. leucaspis



5. marciana

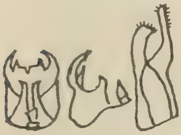


6. alaricus

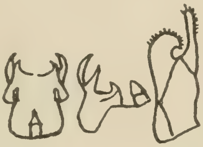


7. pilumnus

E.47. PARAMIMUS

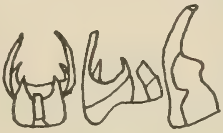


1. stigma

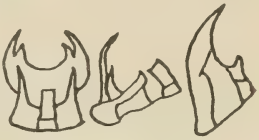


2. scurra

E.48. CHARIDIA

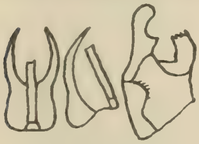


1. lucaria

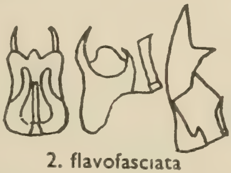


2. empolaeus

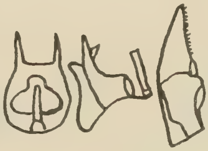
E.49. POTOMANAXAS



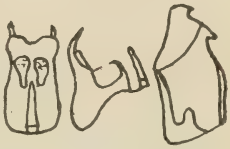
1. unifasciata



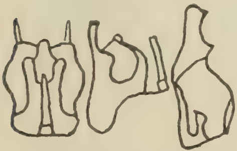
2. flavofasciata



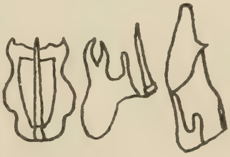
4. thoria



5. melicertes



6. hirta



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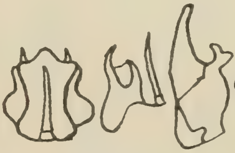
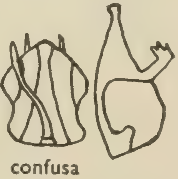
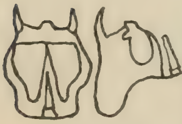


7. effusa



confusa



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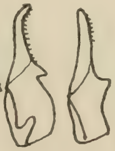

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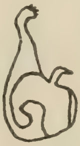
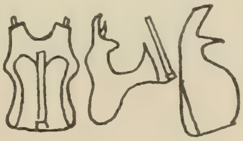
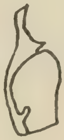


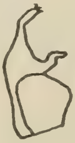
9. latrea



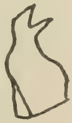
10. laoma



trex



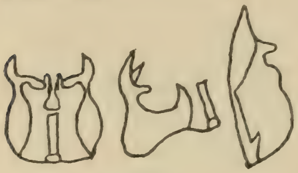
violacea

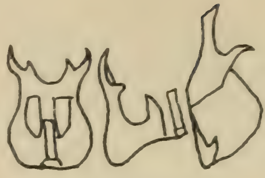


cosna

British Museum (N.H.)

E.49. POTOMANAXAS


11. frenda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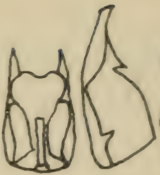
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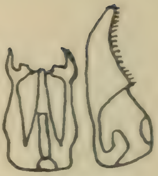
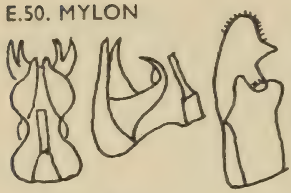

forum

E.50. MYLON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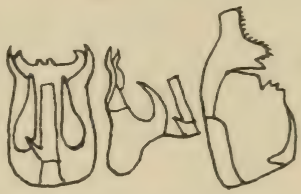
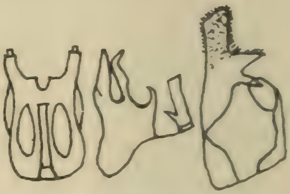
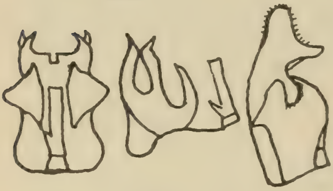

2. zephus


3. illineatus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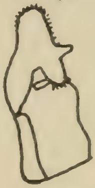
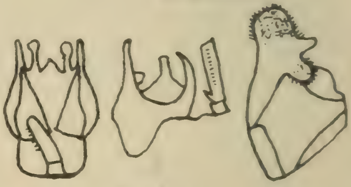

5 mestor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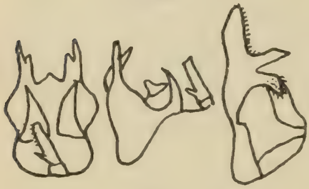
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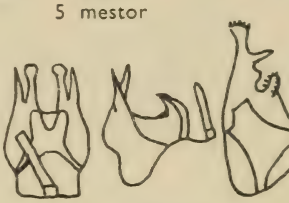
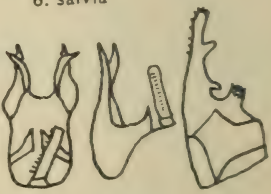

8 menippus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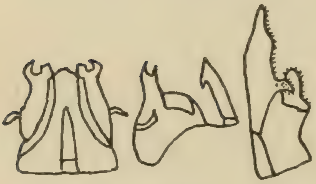
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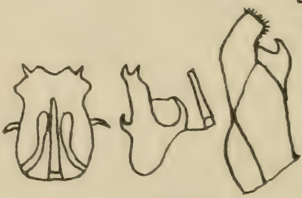
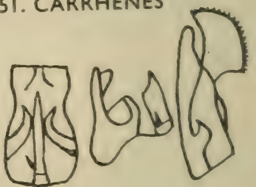
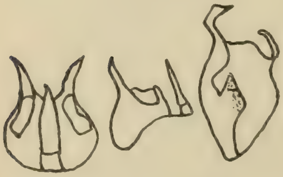
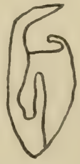

11. jason

E.51. CARRHENES


1. fuscescens


2. canescens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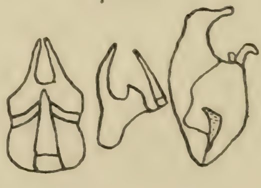
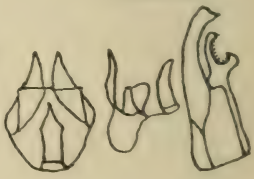
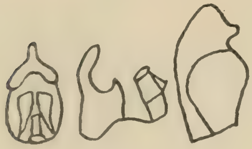
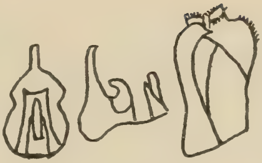

3. callipetes


4. santes

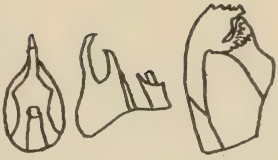
E.52. CLITO



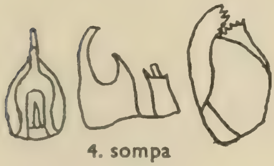
1. littera



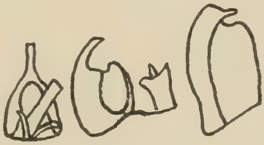
2. bibulus



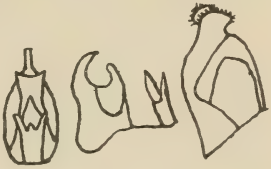
3. clito



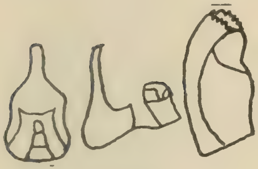
4. sompa



5. zelotes

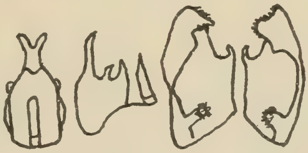


6. zenda



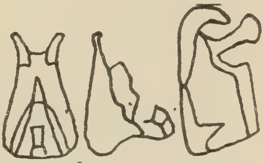
7. tuva

E.53. XENOPHANES



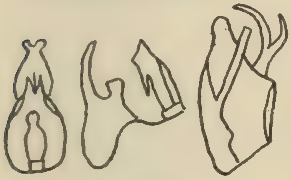
tryxus

E.54. ONENSES

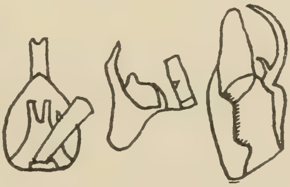


hyalophora

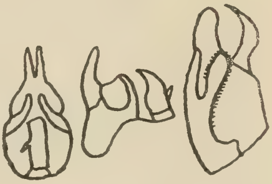
E.55. ANTIGONUS



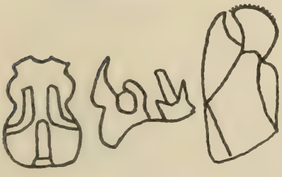
1. nearchus



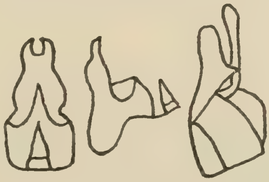
2. erosus



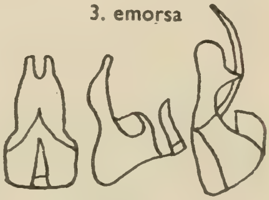
3. emorsa



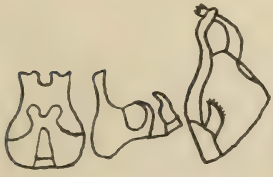
4. decens



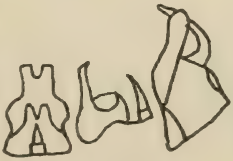
5. funebris



6. corrosus

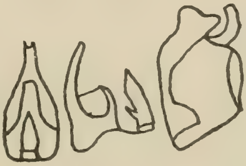


7. mutilatus

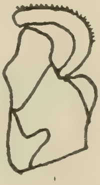


8. liborius

E.56. SYSTASEA

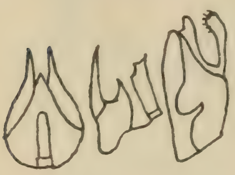


1. pulverulenta

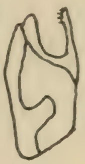


2. evansi

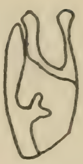
E.57. TIMOCHREON



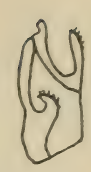
1. satyrus



forta

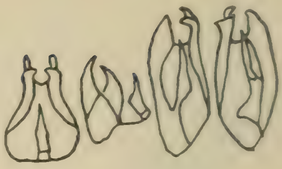


tampa

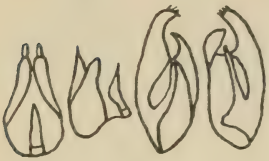


2. doria

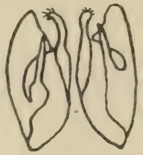
E.58. ZOPYRION



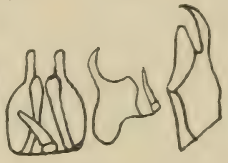
1. sandace



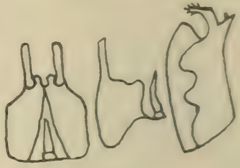
2. satyrina



3. evenor

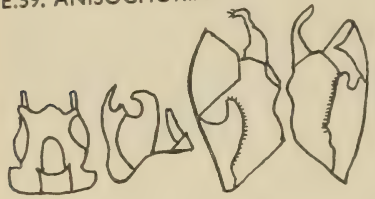


4. subvariegata

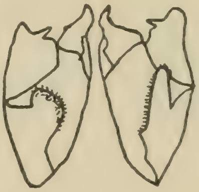


5. reticulata

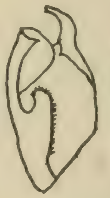
E.59. ANISOCHORIA



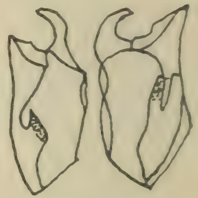
1. pedaliodina



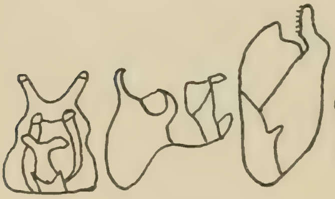
bacchus



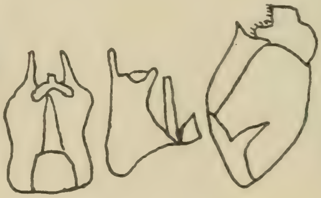
polysticta



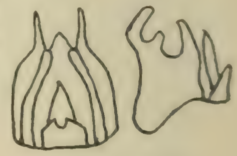
extincta



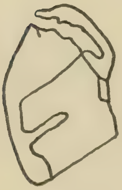
2. sublimbata



3. subpicta



4. minorella



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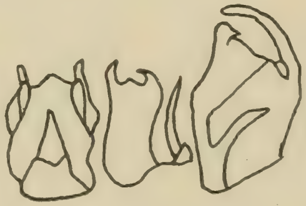

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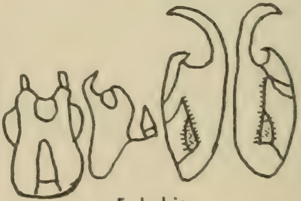

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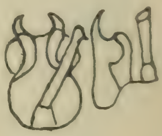

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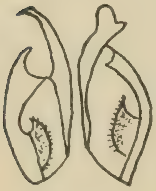

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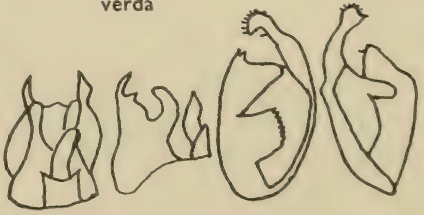

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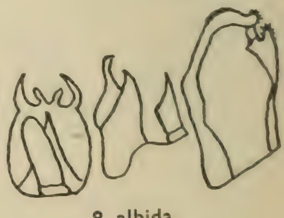
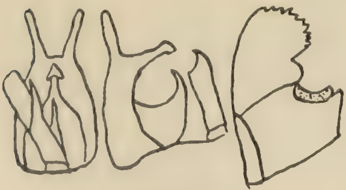


8. albida

F.1. AETHILLA



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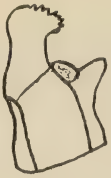

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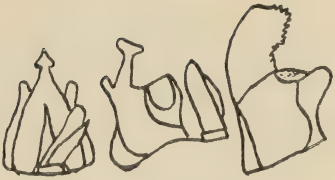

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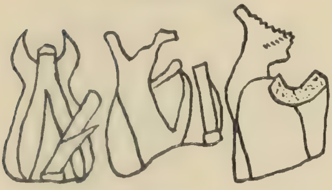

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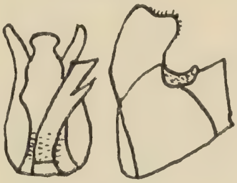

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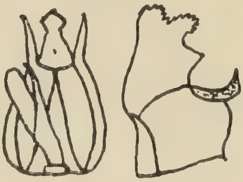

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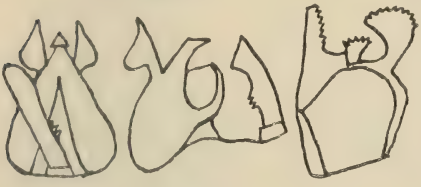

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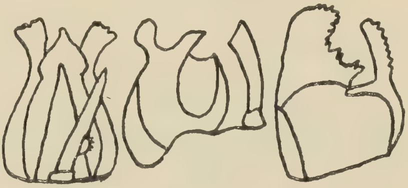
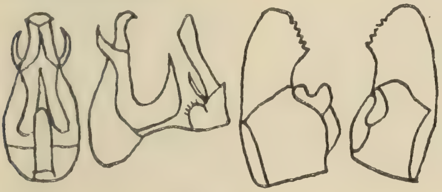


8. later

F.2. ACHLYODES



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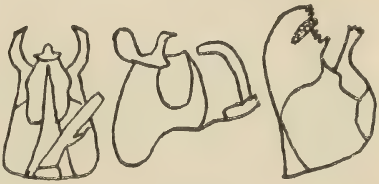

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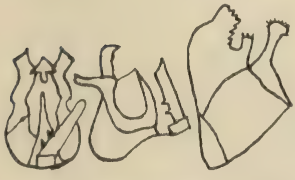

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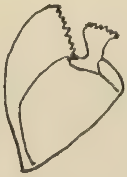

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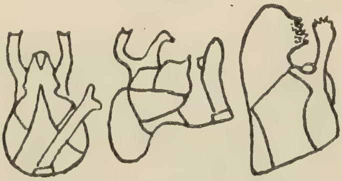

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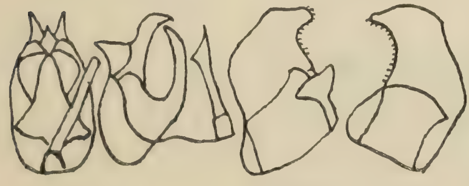

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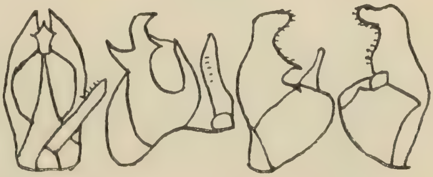

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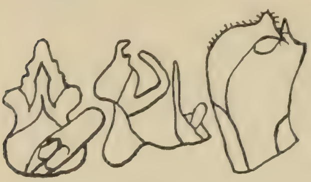
F.3. GRAIS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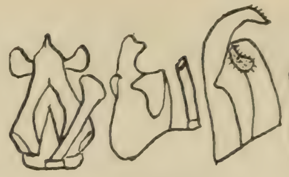
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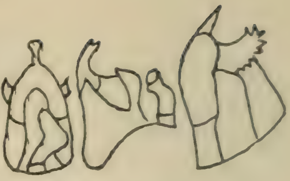
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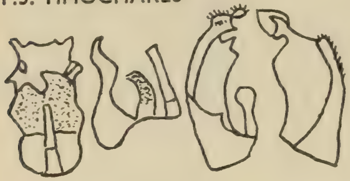
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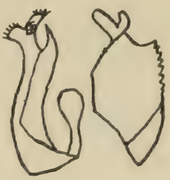
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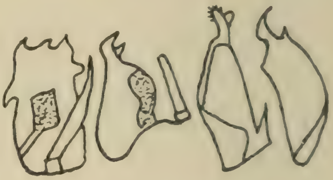
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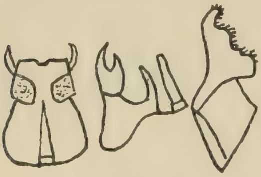
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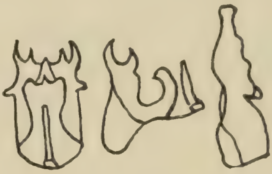
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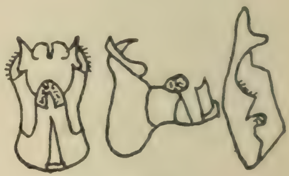
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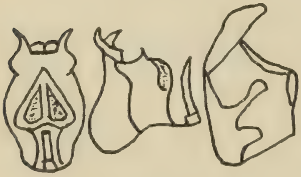
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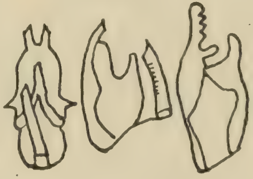
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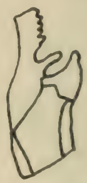
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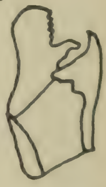
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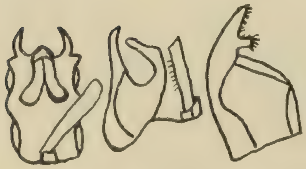
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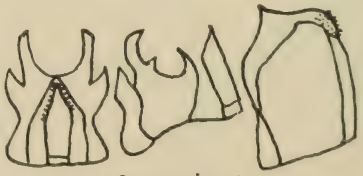
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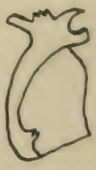
F.7. TOSTA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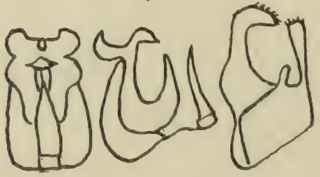
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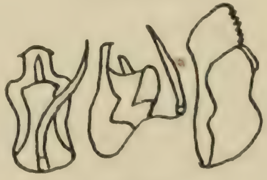
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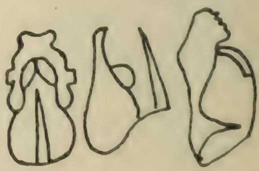
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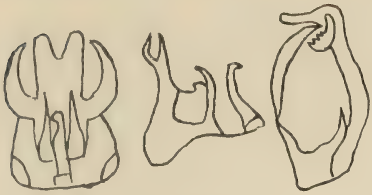
F.7. TOSTA

F.8. EBRIETAS



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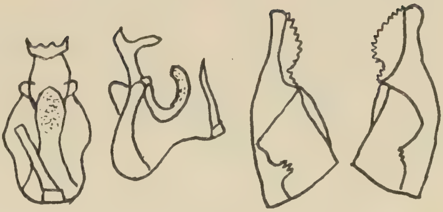

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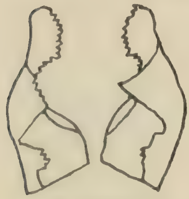

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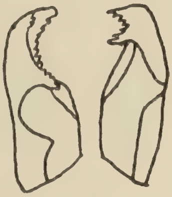

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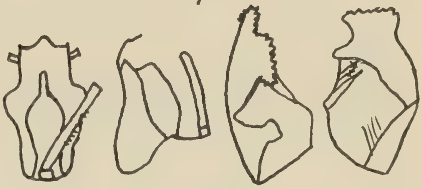

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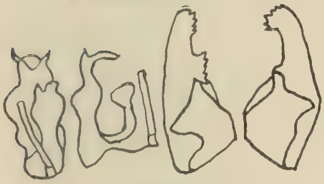

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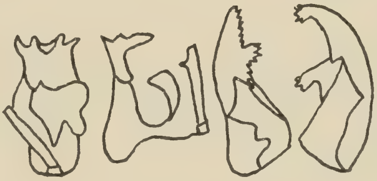

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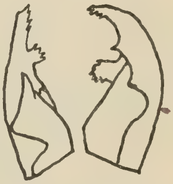

livius

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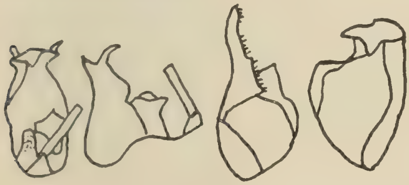

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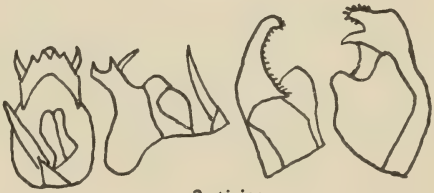

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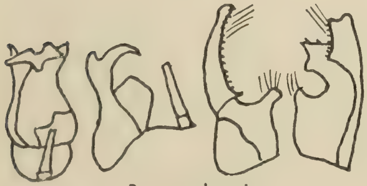

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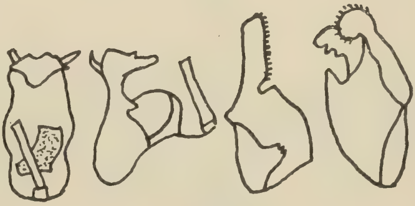

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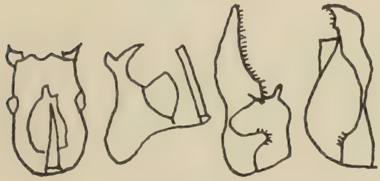

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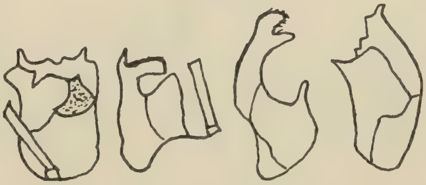
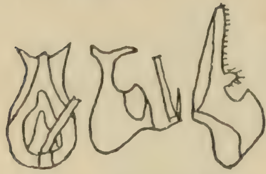


6. polax

F.10. HELIAS



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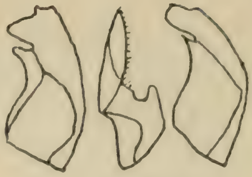
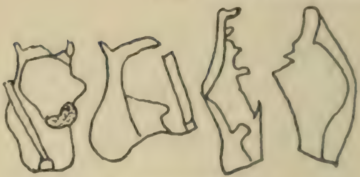


godmani

F.11. CAMPTOPLEURA



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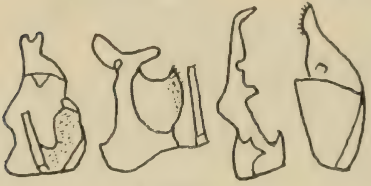

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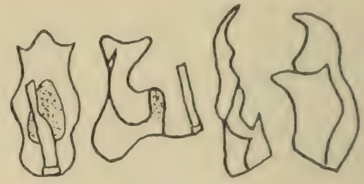

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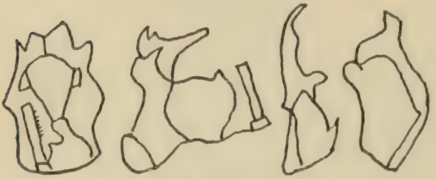

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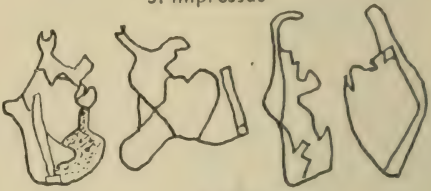
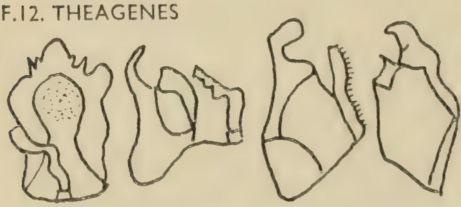


5. janthinus

F.12. THEAGENES



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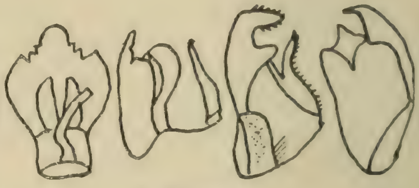
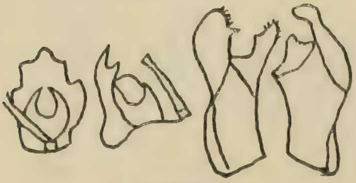


2. dichrous

F.13. CHIOMARA



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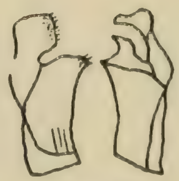

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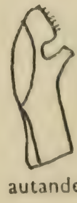

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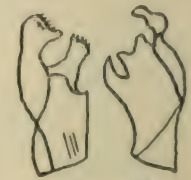

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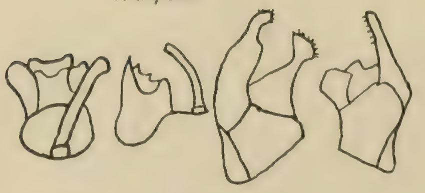

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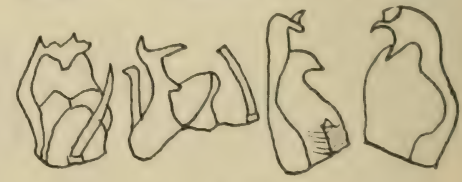
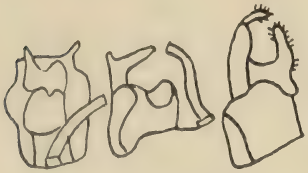
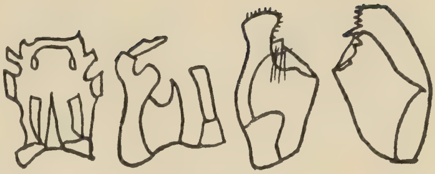


3. mithrax

F.13. CHIOMARA



4. punctum



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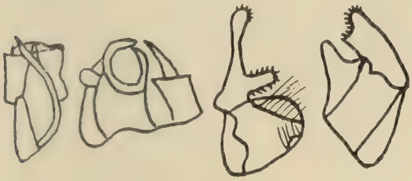
F.14. GESTA



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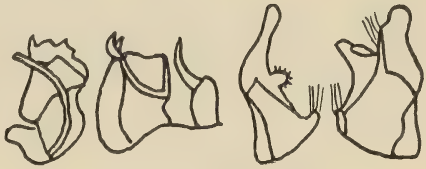

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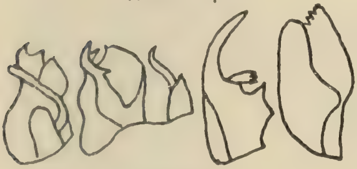

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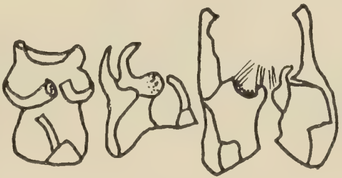

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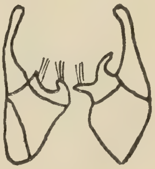

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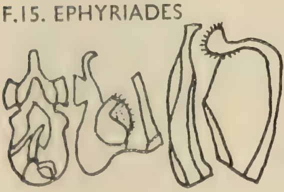
F.15. EPHYRIADES



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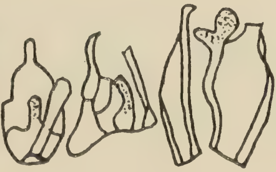

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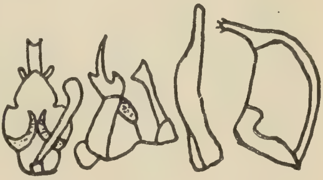

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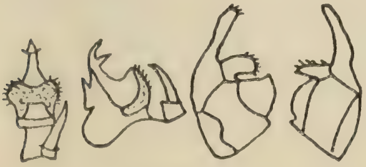
F.16. ERYNNIS



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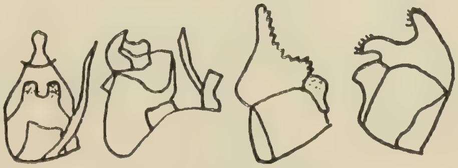

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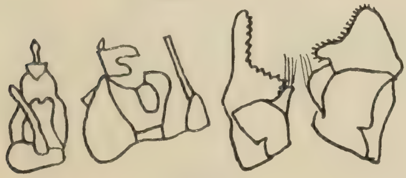

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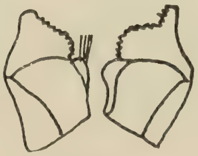

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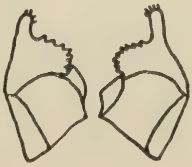

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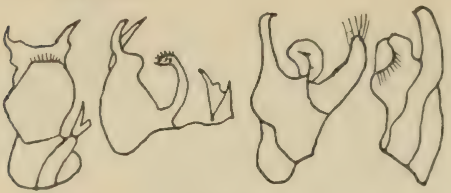
F.16. ERYNNIS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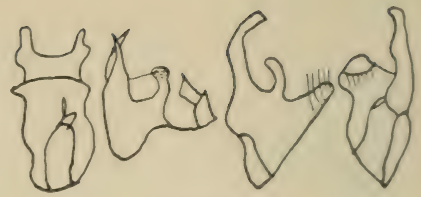
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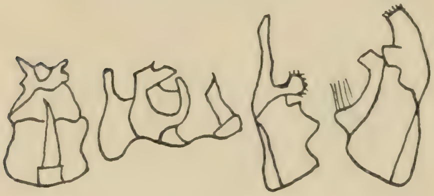
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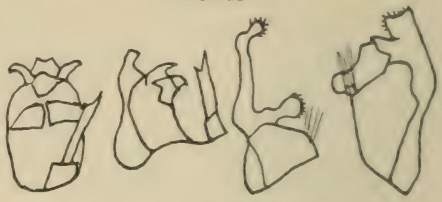
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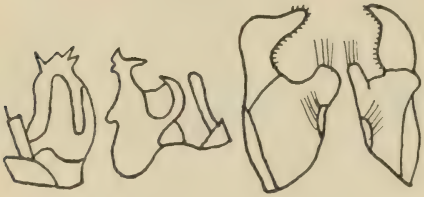
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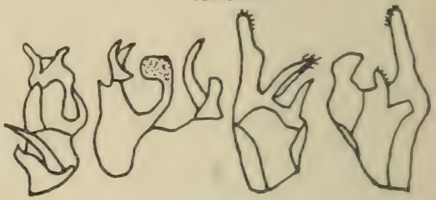
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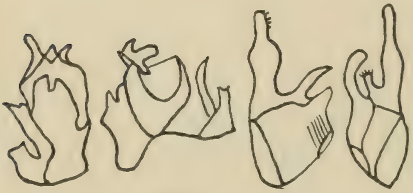
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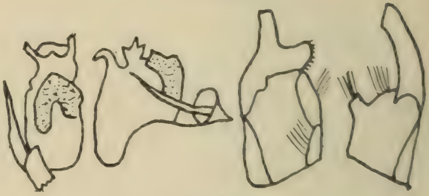
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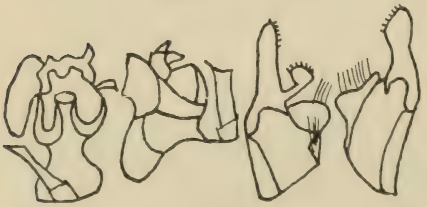
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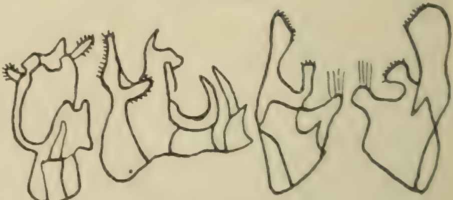
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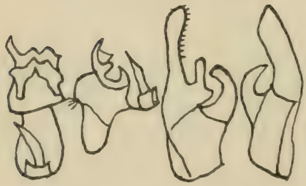
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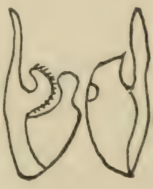
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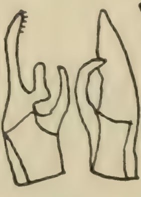
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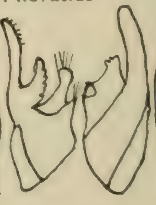
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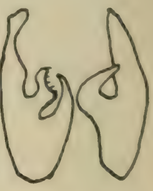
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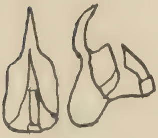
G.1. PYRGUS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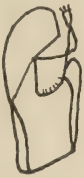
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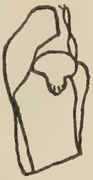
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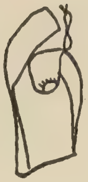
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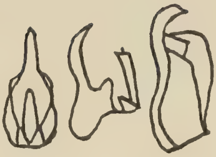
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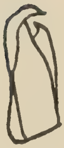
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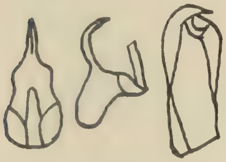
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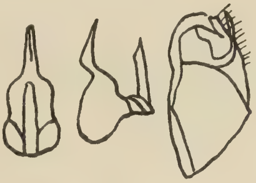
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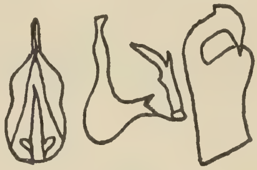
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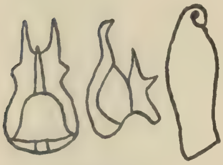
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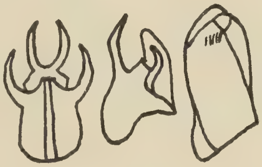
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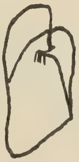
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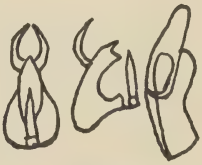
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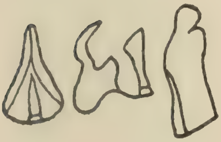
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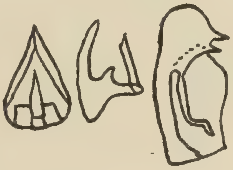
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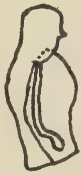
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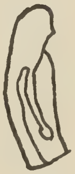
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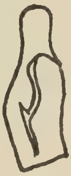
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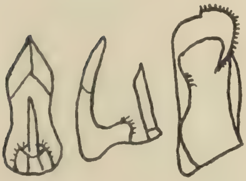
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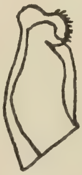
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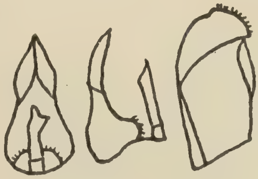
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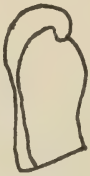
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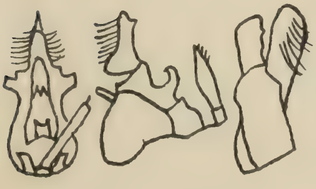
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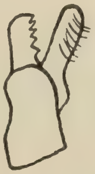
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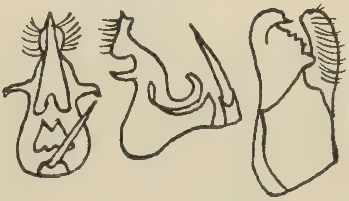
G.2. HELIOPETES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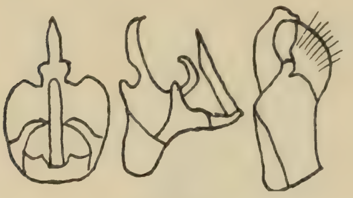
G.2. HELIOPETES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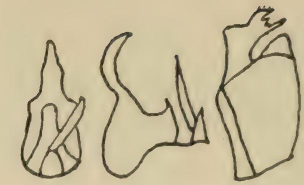
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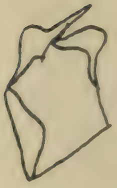
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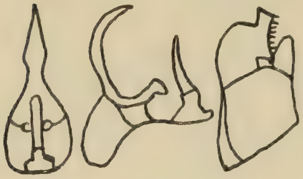
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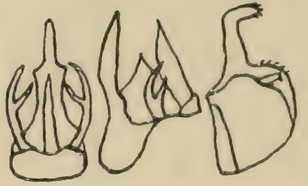
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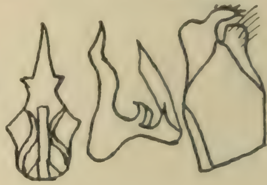
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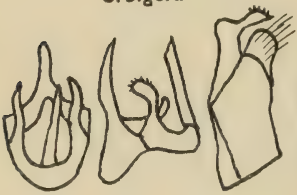
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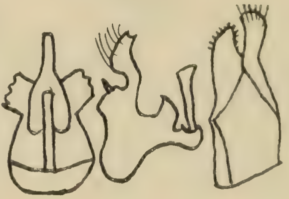
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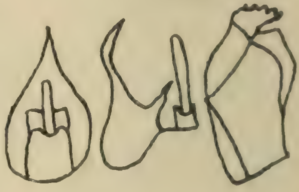
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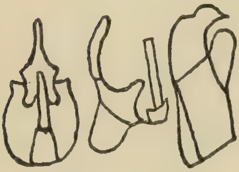
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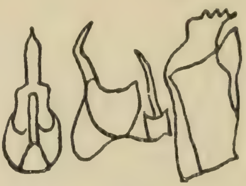
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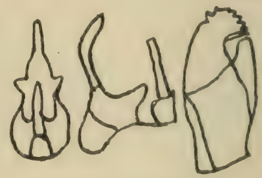
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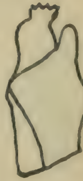
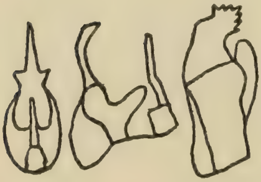

11. chimbo

G.3. CELOTES

G.4. PHOLISORA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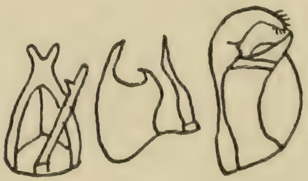
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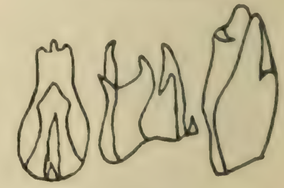
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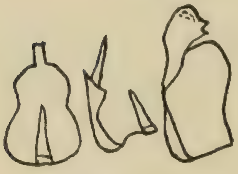
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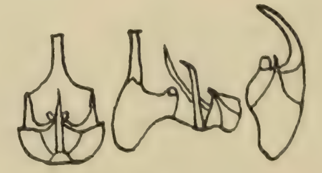
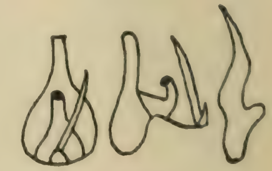

3. libya


4. alpheus

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